An Empirical Study of Customer Switching Behaviour in Service Industries

by

Leona Tam Wing Yin

A Thesis Submitted in Partial Fulfilment of
the Requirement of the Degree of
Master of Philosophy

in

The Faculty of Graduate Studies

(Department of Marketing)

The Chinese University of Hong Kong

Revised: July 1997

Leo Sin

Thesis Professor
Dr Leo Sin Yat Ming

ABSTRACT

Services have been a major topic for marketing research for quite some time. Not until, recently, however, have researchers become interested in consumers' switching behavior. Several past studies in service switching have tried to explain what factors affecting switching and/or complaint behavior and what are the characteristics of switchers. These studies, however, were limited by either industry-specific nature of the studies, asymmetrical inclusion of positive and negative factors into the service switching models, exclusion of service outcome quality from the measurement scale, and/or exclusion of personal characteristics factors especially those of personality traits and psychographics as determinants of switching.

In this study, a "general" model of customer service switching, which aimed at overcoming limitations in past studies, was proposed and empirically tested. The generalizability of this "general" model were also explicitly examined by applying the model to each individual service industry included in this study. Specifically, a survey of three service industries (i.e., fastfood restaurants, hair salons, and banking services) representing three service categories (i.e., search, experience, and credence services) using university students as sample was conducted. Analyses of data showed that the proposed model was useful as a diagnostic and predictive tool for understanding consumer behavior in switching and that although there were differences in consumer responses among different service categories, the conceptual model was generalizable to each of the service industries included in the study. Conceptual and managerial contributions, limitations, and future research direction are also discussed in this study.

TABLES OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Chapter I

INTRODUCTION

1.0 Overview

It is widely known among services marketers that *having* customers, not merely *acquiring* customers, is crucial for service firms (Berry 1980). Research shows that, in terms of having customers, service quality (Bitner 1990; Boulding et al. 1993), relationship quality (Crosby and Stephens 1987), and overall service satisfaction (Cronin and Taylor 1992) can improve customers' intentions to stay with a firm. But what of *losing* customers? What actions of service firms, or their employees, cause their customers to switch from one service provider to another? What are the characteristics of customers who are likely to switch?

The answers to these questions are important to both service marketing managers and service marketing scholars. Service firm executives are concerned about the negative effects of customer switching on market share and profitability (Rust and Zahorik 1993). At the minimum, switching costs a service firm the customer's future revenue stream. But the loss is even more damaging when other effects are considered: First, the loss of a continuing service customer is a loss from the high-margin sector of the firm's customer base because continuing customers increase their spending at an increasing rate, purchase at full-margin rather than discount prices, and create operating efficiencies for service firms (Reichheld and Sasser 1990). Second, costs associated with acquiring new customers are incurred: New account setup, credit searches, and advertising and promotional

expenses can add up to five times the cost of efforts that might have enabled the firm to retain a customer (Peters 1988). Operating costs rise as the service firm learns the need of its new customer and the customer learns the procedures of the firm. Executives need research-based knowledge if they are to avoid the revenue-reducing and cost-incurring impacts of customer switching.

Although there are several articles in the literature that examine service switching, they either focus on switching process in a particular industry or are qualitative in nature. For example, customer switching has been related to perceptions of quality in the banking industry (Rust and Zahorik 1993), overall dissatisfaction in the insurance industry (Crosby and Stephens 1987), and service encounter failures in retail stores (Kelley, Hoffman, and Davis 1993). However, the industry-specific nature of these studies necessarily limits the generalizability of these findings and leads us to adopt the broader, cross industry perspective endorsed by many researchers (Berry and Parasuraman 1993; Lovelock 1983; Zeithaml, Berry, and Parasuraman 1988). Keaveney's (1995) work on proposing a customer's service switching behavior model and Lovelock's (1983) work on services classification scheme are examples of research from the broader, cross industry perspective. However, both of them are qualitative studies. As such, there is an urgent need for an empirical, cross-industry study of service switching behavior.

1.1 Objective

The objective of this study is to help managers and researchers understand service switching from the customer's perspective. Specifically, the objective of this research is to propose and empirically

test a broader, cross-industry service switching behavior model. To fulfil this objective, an empirical research was conducted in this study to identify attitudes that influence intention to switch from the current service to another and factors that impact each attitude, and to test the causal relationships among these psychological constructs.

1.2 The Service Switching Behavior Model

The model of service switching behavior proposed and tested in this study was conceptualized by using the *more contemporary view of attitudes* as the model framework. According to the model, a customer's intention to switch from the current provider to another is a function of two attitudes: attitude toward the current service provider and attitude toward switching. The customer's attitude toward the current service provider, in turn, is a function of service-related factors including service outcome quality component and service process quality components, which include tangibles, reliability, responsiveness, assurance, and empathy. The customer's attitude toward switching, on the other hand, is a function of the customer's personal characteristics (i.e., personality traits) including innovativeness and opinion leadership, and service category-specific factors including ease of identifying the service outcome quality and alternative attractiveness.

1.3 The Design

Since the objective of this study was to propose and empirically test a "general" service switching model (or a service switching model that is applicable to various service industries), both precision

of measurement and generalization of the results were desirable aspects of research design. Precision of measurement was important because of the need to test the hypothesized causal relationships specified in the conceptual model. Generalization was important because of the need for generalizability of the results to various service industries.

In order to gain precision of measurement, "noise" due to different background variables (i.e., demographics) must be reduced. This reduction can be achieved by applying mode K or "holding some background variables (e.g., demographics) constant" to the sample (McGrath 1982). The larger the number of the variables being held constant, the more homogeneous is the sample. As such, a very homogeneous sample would be needed for this study to gain high precision of measurement. On the other hand, generalization can be gained by using a representative sample of the customers of all service industries.

From the above discussion, it is clear that there is a conflict between the two desirable aspects of research design in this study. The very operation that maximizes precision of measurement is the very operation that reduces the generalization of the results, and vice versa. It is clear that a compromise in the design is needed. As a result, university students, which can be considered as a relatively homogeneous sample in terms of demographic and psychographic background, was used as the sample in this study. On the other hand, three services, which represent three categories of services, were used in this study thus maintaining certain degree of generalization of the results. These three services were fastfood restaurants, hair salons, and banks, representing search, experience, and credence services, respectively.

1.4 Significance of This Study

In terms of theoretical contribution, this study represents a pioneering effort to propose and empirically test a broad, cross-industry service switching behavior model. Apart from confirming the significance of some service-related factors, some personal characteristics (i.e., personality traits), and some industry-specific factors (i.e., market characteristics surrounding the firm) as the determinants of service switching behavior, this study also makes theoretical contributions by explicitly addressing the four main limitations of the past studies (i.e., industry-specific nature of data, asymmetrical nature of positive and negative factors included in the model, lack of outcome quality component in the model, and absence of personal characteristics especially personality traits) by using a comprehensive conceptual model and an appropriate research design.

In terms of managerial contribution, the findings would provide service marketers with information regarding the psychological process by which customers make their decision to switch from their current service providers to another. Note that the three services selected for this study (fastfood restaurants, hair salons, and banks) are services that university students regularly use. As such, although the results cannot be generalized to other market segments of these three services industries/categories, they would be useful information for the marketing managers of these services to formulate plans and strategies for the student segement, which is a very important market segment of these firms both now and in the future.

1.5 Outline of This Paper

The rest of this paper is organized as follow: First, a review of relevant literature in the area of service switching behavior is presented in Chapter 2. The objective of this chapter is to show the findings of past studies that lead to the conceptual model of this study. Hypotheses are also proposed in this chapter. Next, Chapter 3 covers the methodology aspect of this study. Research strategy, design, sampling, data collection method, operationalization of constructs, statistical analytic procedures, and research plan are discussed. In Chapter 4, results from the pretests, reliabilities, and structural equation modeling are examined and discussed. Finally, theoretical contributions, managerial implications, limitations, and future research direction are discussed in Chapter 5.

Chapter II

REVIEW OF LITERATURE AND MODEL DEVELOPMENT

2.0 Overview

This chapter first presents a review of relevant studies that lead to the conceptual model of the customer service switching behavior model. Specifically, literature concerning (1) unique characteristics of services, (2) classification of services, (3) measurement of service quality, (4) past studies in service switching behavior, and (5) characteristics of switchers are first reviewed. The limitations of past studies are then discussed. Next, the conceptual model is proposed and each of the constructs included in the model is defined. Finally, the causal relationships specified in the model are discussed and the hypotheses are proposed.

2.1 Review of Relevant Studies in Services

2.1.1 Unique Characteristics of Services

There has long been a debate among both academics and practitioners regarding the differences between goods and services. It is generally agreed that services have four unique characteristics that distinguish them from goods: intangibility, inseparability, heterogeneity, and perishability (Lamb, Hair, and McDaniel 1996).

Probably the single most important difference between services and goods is the greater intangibility of services (Brierley and Bateson 1977; Berry 1980; Lovelock 1981; Rathmell 1974; Rushton and Carson 1989; Shostack 1977; Zeithaml 1981). Because of their intangibility, services cannot be touched, seen, tasted, or felt in the same manner in which goods can be sensed. Intangibility is described as the critical goods-services distinction from which all other differences emerge (Parasuraman, Zeithaml, and Berry 1990).

Inseparability refers to the simultaneous production and consumption of services which characterize most services (Beery 1980, 1983; Booms and Bitner 1981). Goods are produced, sold, and then consumed. In contrast, services are first sold, then produced and consumed at the same time (Carmen and Langeard 1980; Grönroos 1983; Zeithaml 1981). In other words, their production and consumption are inseparable activities. Since the customer must be present during the production of many services, inseparability forces the buyer into intimate contact with the production process (Upah and Uhr 1981). Inseparability also means that the producer and the seller are often the same entity, making direct distribution possible in most cases and causing marketing and production to be highly interactive (Lovelock 1981).

Heterogeneity concerns the potential for high variability in the performance of services. In other words, services tend to be less standardized and uniform than goods. The quality and essence of services can vary from producer to producer, from customer to customer, and from day to day (Bell 1981; Zeithaml 1981). Because services tend to be labor-intensive and production and consumption of services are inseparable, consistency and quality control can be hard to achieve.

Perishability means that services cannot be saved, stored, warehoused, or inventoried (Bell 1981; Berry 1980, 1983; Upah 1980; Upah and Uhr 1981; Thomas 1978). Because services are performances that cannot be saved, one of the most important challenges in many service industries is thus finding ways to synchronize demand and supply.

These unique characteristics of services especially intangibility generally make services more difficult for the customers to evaluate the outcome than tangible goods. Even among services, customers generally find that they have different degree of difficulty in evaluating the outcome of using different categories of services. As such, classification of services into categories is necessarily different from the existing classification schemes for goods. In this study, the classification of service industries into service categories is also necessary for the selection of representative services to be included in this study. The classification of services will be discussed in the next section.

2.1.2 Classification of Services

Several researchers have proposed different schemes for classifying services. Judd (1964) first proposed to classify services into three categories: (1) rented goods services (right to own and use a good for a defined period of time), (2) owned goods services (custom creation, repair, or improvement of goods owned by the customer), and (3) non-good services (personal experiences or "experiential possession"). The first two categories are specific but the third one is very broad and ignores services such as insurance, banking, legal advice, and accounting.

Following Judd (1964), Rathmell (1974) suggested the use of five criteria in classifying services: (1) type of seller, (2) type of buyer, (3) buying motives, (4) buying practice, and (5) degree of regulation. This classification scheme has no specific application to services because it could apply equally well to goods (Lovelock 1983).

Then there were two more independent studies that broadly proposed similar classification schemes. Both Shostack (1977) and Sasser, Olsen, and Wyckoff (1978) recommended the use of the proportion of physical goods and intangible services contained within each product "package" as the classification criterion. This classification scheme offers opportunities for multiattribute modeling. It emphasizes that there are few pure goods or pure services.

Hill (1977) proposed the use of five factors in classifying services: (1) services affecting persons vs. those affecting goods, (2) permanent vs. temporary effects of the services, (3) reversibility vs. non-reversibility of these effects, (4) physical effects vs. mental effects, and (5) individual vs. collective effects. This classification scheme emphasizes the nature of service benefits (Factor 1 to Factor 4) and variations in the service delivery/consumption environment (Factor 5).

Thomas (1978) classified services into two categories: primarily equipment-based services and primarily people-based services. Primarily equipment-based services can be further classified into three categories: automated, monitored by unskilled operators, and operated by skilled personnel. Primarily people-based services can also be classified into three categories: unskilled labor, skilled labor, and professional staff. Although this classification scheme is operational rather than

marketing in orientation, it provides a useful way to understand service attributes.

Chase (1978) classified services based on the extent of customer contact required in service delivery: high contact (e.g., health care, hotels, restaurants) and low contact (e.g., postal services, wholesaling). This classification scheme recognizes that product variability is harder to control in high contact services because customers exert more influence on timing of demand and service features, due to their greater involvement in the service process.

Kotler (1980) proposed the use of four criteria in classifying services: (1) people-based vs. equipment-based, (2) extent to which client's presence is necessary, (3) fulfilment of personal needs vs. business needs, and (4) public vs. private, for-profit vs. nonprofit. This classification scheme synthesizes previous work and recognizes differences in purpose of service organization.

Lovelock (1980) synthesized previous classifications and added several new schemes. He also proposed several categories within each classifications. Three criteria are used in this classification scheme: (1) basic demand characteristics (object served, extent of demand/supply imbalances, discrete vs. continuous relationships between customers and providers), (2) service content and benefits (extent of physical goods content, extent of personal service content, single service vs. bundle of services, timing and duration of benefits), and (3) service delivery procedures (multi-site vs. single site delivery, allocation of capacity, independent vs. collective consumption, time defined vs. task defined transactions, extent to which customers must be present during service delivery). Lovelock (1980) concluded that defining object served is the most fundamental classification

scheme. He also suggested that valuable marketing insights would come from combining two or more classification schemes in a matrix.

Lovelock (1983) later proposed new classification schemes by examining characteristics of services that transcend industry boundaries and are different in degree or kind from the classification schemes traditionally applied to manufactured goods. He proposed five classification schemes, each of which represent an attempt to answer one of the following questions: (1) What is the nature of service act? (2) What type of relationship does the service organization have with its customers? (3) How much room is there for customization and judgment on part of the service provider? (4) What is the nature of demand and supply for the service? and (5) How is the service delivered? Lovelock (1983) reasoned that these classification schemes have been selected because of their potential for affecting the way marketing management strategies are developed and implemented.

Schmenner (1986) proposed a classification scheme that emphasizes the importance of customization. The scheme uses two dimensions, degree of interaction/customization and degree of labor intensity, to classify service industries into (1) service factory, (2) service shop, (3) mass service, and (4) professional services. Apart form recognizing the importance of customer interaction, Vandermerwe and Chadwick (1989) also recognized the importance and role of goods components in service businesses. They used two dimensions, degree of customer/producer interaction and relative involvement of goods, to classify services. Haywood-Farmer (1988) also proposed a service classification scheme for quality control purposes. Three dimensions are used in the classification: labor intensity, degree of contact and interaction with the customer, and degree

of customization.

Finally, Powpaka (1996) proposed a classification scheme based on the characteristics of outcome quality of using the service. Based on this scheme, there are three categories of services: services with *search* outcome quality (or *search* services), services with *experience* outcome quality (or *experience* services), and services with *credence* outcome quality (or *credence* services). Search services are those of which outcome quality of using these services can be accurately and efficiently evaluated by the customer prior to purchase and consumption. Experience services are those of which outcome quality can be accurately and efficiently evaluated only after services have been purchased and consumed. Credence services are those of which outcome quality cannot be accurately and efficiently evaluated even after they have been purchased and consumed extensively. In other words, the degree of ease or difficulty in identifying the outcome quality is the main criterion in Powpaka's (1996) classification.

Since the objective of this study is to propose and empirically test a broader, cross-industry service switching behavior model, Powpaka's (1996) classification scheme is used in selecting a representative sample of industries to be included in this study.

There are two main reasons to choose Powpaka's (1996) classification scheme. First, compared with all other classification schemes reviewed above, Powpaka's scheme is the only scheme that classifies services from the consumer's perspective. Other schemes classify services from the management's perspective. The customer's judgment regarding the degree of ease of identifying service outcome

quality is the major criterion in Powpaka's (1996) scheme. This construct is also the manipulation-check variable of the scheme. Another main reason for choosing Powpaka's (1996) scheme is that one of the constructs included in the conceptual model of this study, ease of identifying outcome quality, happens to be the same construct as Powpaka's (1996) manipulation-check variable.

2.1.3 Measurement of Service Quality

Evaluating the quality of services before or even after making a purchase is harder than evaluating the quality of goods because of the intangibility of services. Service quality is an abstract construct that is still difficult to define or measure although many researchers have tried to conceptualize and operationalize the construct (Brown and Swartz 1989; Carmen 1990; Garvin 1988; Parasuraman, Zeithaml, and Berry 1985; Parasuraman, Zeithaml, and Berry 1988). Service quality has been described as a form of attitude, related but not equivalent to satisfaction, that results from the comparison of expectations with performance (Bolton and Drew 1991; Parasuraman, Zeithaml, and Berry 1988).

In terms of measurement of service quality, the most widely recognized measurement scale, SERVQUAL, was proposed and later refined by Parasuraman, Zeithaml, and Berry (1985, 1988). Originally, they identified ten dimensions of service quality from data collected from the focus groups of customers of five services including retail banking, credit cards, broker services, repair and maintenance, and long distance telephone services (Parasuraman, Zeithaml, and Berry 1985). These ten determinants of service quality were reliability, responsiveness, competence, access, courtesy,

communication, credibility, security, understanding the customers, and tangibles. These ten dimensions were later refined and five dimensions emerged as components of service quality: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml, and Berry 1988). The resulting 44-item scale (22 items for expectations and 22 items for perceived performance), SERVQUAL, has been found to be a reliable and valid measure of service quality with relatively stable dimensions across industries (Carmen 1990).

Cronin and Taylor (1992) argued that SERVQUAL's expectations component may be unnecessary and the instrument's dimensionality is problematic. These doubts were also shared by several later studies (Cronin and Taylor 1994; Parasuraman, Zeithaml, and Berry 1994; Teas 1993; Teas 1994). Cronin and Taylor (1992) proposed a performance-based scale, SERVPERF, for measuring service quality. They empirically showed that SERVPERF is more efficient than SERVQUAL in measuring service quality; it reduces 50 percent of number of items that must be measured from 44 items to 22 items.

Note that the five dimensions of service quality included in both SERVQUAL and SERVPERF are those of *process* quality attributes. This may result from the use of experience and/or credence services (retail banking, credit cards, broker services, repair and maintenance, and long distance telephone services) by Parasuraman, Zeithaml, and Berry (1988) in conceptualizing the service quality model. However, service customers typically use both the *outcome* dimension (what was delivered) and the *process* dimension (how the service was delivered) of service in evaluating service quality (Grönroos 1982). As such, SERVQUAL and SERVPERF may not be sufficiently

comprehensive in capturing service quality construct. Studies showed that both the outcome quality of using service and the process quality attributes of service delivery are important in determining the customer's overall service quality (Baker and Lamb 1993; Grönroos 1982, 1991; Mangold and Babakus 1991; Powpaka 1996; Richard and Allaway 1993). Since the objective of this study is to propose and empirically test a broader, cross-industry customer's service switching behavior model, outcome quality as well as SERVPERF's five process quality attributes are used in measuring the service quality in this study.

2.1.4 Review of Past Studies in Service Switching Behavior

Review of the services and product literatures reveals a variety of potential, sometimes conflicting, reasons that customers might switch services. For example, customer switching has been related to perceptions of quality in the banking industry (Rust and Zahorik 1993), overall dissatisfaction in the insurance company (Crosby and Stephens 1987), and service encounter failures in retail stores (Kelley, Hoffman, and Davis 1993). However, the industry-specific nature of these studies necessarily limits the generalizability of these findings.

Review of literature also shows that some studies examined behavioral intentions variables, such as "intentions to switch" or "intentions to repatronize a service," in tests of the nomological, measurement, or predictive validity of service quality-satisfaction models (Bitner 1990; Boulding et al. 1993; Cronin and Taylor 1992). The results suggest that satisfaction and service quality are related to service switching. Perhaps the most limiting factor in these studies, however, is that they

were designed to focus on quality, satisfaction, or service encounters--not on service switching. Although service quality failure and dissatisfaction represent some of the reasons that customers switch services, they do not account for all of them.

In a recent article, Keaveney (1995) reported results of a critical incident study conducted among more than 500 service customers. The research identified more than 800 critical behaviors of service firms that caused customers to switch services. Customers' reasons for switching services were classified into eight general categories: pricing, inconvenience, core service failures, failed service encounters, response to failed service, competition, ethical problems, and involuntary switching.

In her study, Keaveney (1995) identifies eight main categories of causal variables of service switching behavior and proposes several two-way interactions among causal variables. Although it can be said that Keaveney's (1995) study is the first empirical study in customer switching behavior in service industries, this study is only an exploratory research in nature. A conclusive research has to be conducted based on her study to confirm her findings. In other words, further evaluative research, including controlled manipulation of proposed causal variables, is needed to test actual causes and effects. Another major problem of Keaveney's model stems from the fact that her model emphasizes only on negative causal factors of switching behavior. Variables and relationships that predict positive outcomes are asymmetrical with those that predict negative outcomes (LaBarbera and Mazursky 1983). As such, both types of variables are included in the conceptual model of this study.

2.1.5 Characteristics of Service Switchers

Review of literature shows that both psychographics and demographics of service switchers were studied. Singh (1990) studied the effect of perceived probability of successful complaint, worthiness of complaint, and consumer sophistication (an overall characteristic that includes a consumer's knowledge about alternatives in the marketplace, awareness of consumer protection rights, concern for quality and satisfaction, and awareness of complaint mechanism) on switching behavior. Results show that only perceived probability of successful complaint and consumer sophistication are significant in predicting switching behavior.

Morgan and Dev (1994) used prior experience, household income, and number of business trips per year as independent variables of switching behavior in retail stores. Results show that prior experience is the most important determinant of switching experience. The more experience the customer, the less likely is the switching behavior. This relationship may be explained by loyalty, which decreases the intention to switch. Results also show that household income and number of business trips have negative relationship with switching behavior.

2.2 Limitations of Past Studies and the Research Methodology Used in This Study

Based on the literature reviewed above, there are four main limitations in service switching behavior studies. First, many of the past studies were industry-specific. This industry-specific nature of these studies limits the generalizability of the findings and leads us to adopt the broader, cross-industry

perspective endorsed by many service researchers (Berry and Parasuraman 1993; Lovelock 1983; Zeithaml, Berry, and Parasuraman 1993). As such, a broader, cross-industry data were collected in this study to overcome this first main limitation. Specifically, data were collected from three service industries (fastfood restaurants, hair salons, and banks), which represent the three service categories according to the classification scheme used in this study, to make the findings more generalizable.

Second, variables and relationships specified in past service switching studies tend to be asymmetrical in terms of positive and negative factors included in the model. For example, most studies emphasize intentions to engage in behaviors beneficial to an organization (i.e., intentions to repatronize) rather than intentions to engage in behaviors harmful to an organization (i.e., intentions to switch). On other hand, Keaveney's (1995) service switching model emphasizes only on the negative aspects of services. Variables and relationships that predict positive outcomes are asymmetrical with those that predict negative outcomes, and vice versa (LaBarbera and Mazursky 1983). As such, two types of attitudes, (positive) attitude toward the current service provider and (negative) attitude toward switching behavior, and their corresponding determinants are included in the conceptual model of services switching behavior in this study.

Third, SERVQUAL and SERVPERF measure only the process quality attributes of service quality. This may due to the fact that the industries included in the scale-development studies (Cronin and Taylor 1994; Parasuraman, Berry, and Zeithaml 1988) are mainly experience and credence services. As reviewed above, studies show that customers used both outcome quality and process quality attributes in determining overall service quality. As such, apart from the process quality constructs,

the outcome quality construct is also included in the conceptual model for the model's comprehensiveness.

Finally, although a few studies investigated the role of customers' psychographics and demographics in service switching, none of the past studies investigated the role of the customer's personal characteristics especially personality traits in service switching. Personality traits, such as innovativeness, opinion leadership, and dogmatism, have been found to play an important role in new product acceptance and product switching behavior. As such, some personality traits are included in the conceptual model of this study for comprehensiveness.

2.3 The Conceptual Model

2.3.1 The Conceptual Framework

Since the objective of this study is to propose and empirically test the service switching behavior model from the customer's perspective, consumer behavior models that clearly explain the consumer's psychological process are very appropriate to be used as the framework for conceptualizing the service switching model. One of such consumer behavior models is the *more contemporary view of the tricomponent attitude model* (Batra and Ahtola 1990; Zanna and Rempel 1988).

According to this view, attitude is viewed as being distinct from its components, with each

component being related to attitude (Batra and Ahtola 1990; Zanna and Rempel 1988). Both the cognitive component (beliefs) and the affective component (feelings) are conceptualized as the determinants of attitudes. In other words, a person's overall evaluation (attitude) of an attitude object is seen as being determined by the person's beliefs and feelings about the attitude object.

Unlike the cognitive and affective components, the conative component (intention) is not seen as a determinant of attitudes. Instead, attitudes are viewed as determining the conative component. That is, a person's behavioral intention will depend on his or her attitudes. Consequently, consumers' intention to perform some behavior (e.g., switching from the current service provider to another) should increase as their attitudes become more favorable toward that behavior. Behavior intentions, in turn, determine future behavior.

Using this contemporary view of the tricomponent attitude model as the framework, we conceptualize that intention to switch from the current service provider to another, a surrogate variable of future switching behavior, is determined by two attitudes, attitude toward the current service provider and attitude toward switching behavior. These two attitudes, in turn, are determined by relevant cognitive components. Specifically, attitude toward the current service provider is influenced by beliefs and feelings concerning various aspects of service quality including service outcome quality, tangibles, reliability, responsiveness, assurance, and empathy. Attitude toward switching, on the other hand, is influenced by the customer's attitude toward switching, two types of personality traits, innovativeness and opinion leadership, and two service category-specific characteristics, alternative attractiveness and ease of identifying service outcome quality. Definitions

of the constructs and literature concerning these proposed causal relationships are discussed in the following sections.

2.3.2 Definition of Constructs

The conceptual model of service switching behavior is shown in Figure 1. Altogether, there are thirteen latent variables or constructs in the model. Before we discuss about the causal relationships among these variables, each of them is defined and elaborated in this section.

Service Outcome Quality

Service outcome quality is defined in this study as the customer's perception of the quality of what was delivered to him or her as a result of purchasing and using a service (Grönroos 1982; Powpaka 1996). In other words, outcome service quality refers to the result of the service transaction, which concerns about what the customer actually receives from the service transaction or, conversely, what is delivered by the service provider.

Process Service Quality

Process service quality is defined in this study as the customer's perception regarding the quality of the manner in which the customer received the service from the service provider (Parasuraman, Zeithaml, and Berry 1985, 1988). In other words, process service quality concerns with what

happens in the transaction between the customer and the service provider (i.e., how service was delivered).

According to Parasuraman, Zeithaml, and Berry (1988), there are five process quality attributes: tangibles, reliability, responsiveness, assurance, and empathy. *Tangibles* is defined as the physical aspect of service such as equipments, facilities, and the employees' dresses and appearance. *Reliability* refers to the dependability of the employees in performing the service according to what is promised. *Responsiveness* refers to the promptness of the employees in responding to customers. *Assurance* is defined as the feelings of trust and confidence that the customer obtains in transacting with the employees. Finally, *empathy* refers to the attention and understanding that the customer receives from the employees.

Alternative Attractiveness

Alternative attractiveness is defined in this study as the perceived service quality of the alternatives available to an individual customers. This definition is derived from definitions by Ping (1990, 1993), Ping and Dwyer (1988), Rusbult et al. (1988), Rusbult, Johnson, and Gunn (1982), Rusbult, Johnson, and Morrow (1986), and Rusbult and Zembrodt (1983).

Ease of Identifying Service Outcome Quality

Ease of identifying outcome service quality is defined in this study as the degree of ease in the

evaluation of the outcome quality of purchasing and using a service. This construct is derived and defined based on past studies concerning how easy or difficult it is for customers to evaluate the outcome of using a service (Darby and Karni 1973; Iacobucci 1992; Nelson 1974; Powpaka 1996).

Innovativeness

As a personality trait, innovativeness is defined in this study as the degree in which an individual is relatively early or late in adopting an innovation (Midgley and Dowling 1978; Rogers 1983). Note that innovativeness is domain-specific. Consumers tend to be innovative within a specific domain of interest. As such, innovators for a particular domain of interest tend to be venturesome and will to take risk in that domain of interest (Peter and Olson 1994).

Opinion Leadership

Opinion leadership, another personality trait included in the conceptual model, is defined in this study as the extent to which an individual gives information about a topic (Reynolds and Darden 1971). As such, opinion leaders are individuals who exert considerable personal influence because other people seek information from them and/or because others accept the advice volunteered by these leaders. Note that opinion leadership is also domain-specific (Hofacker 1991; King and Summers 1970; Myers and Robertson 1972; Reynolds and Darden 1971; Rogers 1983). In other words, opinion leaders often "specialize" in certain domain of interest about which they offer information and advice.

Attitude toward the Current Service Provider

Attitudes are defined in this study as learned predispositions to respond or behave in a consistently favorable or unfavorable way with respect to a given attitude object (Batra and Ahtola 1990; Zanna and Rempel 1988). As such, attitude toward the current service provider is defined as the customer's favorable predisposition or overall evaluation toward his or her current service provider.

Attitude toward Switching

Based on the above discussion, attitude toward switching is defined in this study as the customer's favorable predisposition or overall evaluation toward switching from the current service provider to another.

Intention to Switch

The definition of this construct is straightforward. It is defined as the customer's intention to switch from the current service provider to another service provider.

2.3.3 Causal Relationships among Constructs in the Conceptual Model and Hypotheses

As shown in Figure 1, it is posited that intention to switch is negatively influenced by a customer's attitude toward the current service provider and is positively influenced by his or her attitude toward

switching. Attitude toward the current service provider, in turn, is produced by the customer's perceived service quality components including service outcome quality, tangibles, reliability, responsiveness, assurance, and empathy. Attitude toward switching, on the other hand, is influenced by two types of personality traits, innovativeness and opinion leadership, and two service category-specific factors, alternative attractiveness and ease of identifying service outcome quality. Each relationships is discussed and elaborated in the following sections.

The Effect of Attitude toward the Current Service Provider and Attitude toward Switching on Intention to Switch

According to both traditional (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975) and contemporary views of the tricomponent attitudes (Batra and Ahtola 1990; Zanna and Rempel 1988), and other empirical studies on attitude-related model such as Theory of Planned Behavior (Bagozzi 1981, 1982; Ajzen 1991), attitudes are the determinants of behavior intention. As a general rule, the more favorable the attitude with respect to a given attitude object, the stronger the behavior intention. However, this will happen only when there is a positive relationship between the attitude and the behavioral intention. In our study, two types of attitudes are proposed to determine the customer's intention to switch from the current service provider to another: attitude toward the current service provider and attitude toward switching (which is switching from the current service provider to another service provider). Note that there is a positive relationship between attitude toward switching and intention to switch while there is a negative relationship between attitude toward the current service provider and intention to switch. As such, the following hypotheses are proposed:

H_1 : Attitude toward the current service provider is negatively related to intention to switch from the current service provider to another.

H_2 : Attitude toward switching is positively related to intention to switch from the current service provider to another.

Since attitude toward the current service provider and attitude toward switching represent cognitive outcomes that are logically linked in memory and, accordingly, should exert direct influence on each other (Shimp and Kavas 1984), it is also proposed here that:

H_3 : Attitude toward the current service provider is negatively related to attitude toward switching.

Antecedents of Attitude toward the Current Service Provider

Review of service and product literatures reveals a variety of potential reasons that customers might switch services. One of such potential reasons for customer switching has been related to perceptions of quality (Cronin and Taylor 1992; Parasuraman, Zeithaml, and Berry 1988). However, the conceptual models of service quality of these authors contain only process quality attributes, which are tangibles, reliability, responsiveness, assurance, and empathy. Several recent studies show that service quality evaluation involves both outcome and process quality attributes of service delivery (e.g., Baker and Lamb 1993; Grönroos 1982, 1990; Mangold and Babakus 1991; Powpaka

1996; Richard and Allaway 1993). As such, both types of attributes are included in the conceptual model of this study.

Based on the conceptual framework used in this study (Zanna and Rempel 1988), attitudes develop reasonably from the beliefs people hold about the object of attitude. This contention has also been supported by a considerable number of studies (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975; Bagozzi 1981, 1982). In other words, to the extent that the service provider is perceived to provide good outcome quality, to be reliable, responsive, assuring, and empathic, and to have good physical facilities, the customer should have a favorable attitude toward the service provider. As such, the following hypotheses are proposed:

H_4 : Service outcome quality is positively related to attitude toward the current service provider.

H_5 : Process outcome quality is positively related to attitude toward the current service provider.

H_{5a} : Tangibles is positively related to attitude toward the current service provider.

H_{5b} : Reliability is positively related to attitude toward the current service provider.

H_{5c} : Responsiveness is positively related to attitude toward the current service

provider.

H_{5d} : Assurance is positively related to attitude toward the current service provider.

H_{5e} : Empathy is positively related to attitude toward the current service provider.

Antecedents of Attitude toward Switching

In the conceptual model, there are two category-specific factors that are proposed to determine attitude toward switching: alternative attractiveness and ease of identifying the service outcome quality. Alternative attractiveness is defined as the perceived quality of the alternatives available to an individual customer (Rusbult, Zembrodt, and Gunn 1982). According to Rusbult, Zembrodt, and Gunn (1982), alternative attractiveness or the quality of the alternatives available would determine whether or not the individual's response to dissatisfaction will be active or passive. Higher alternative attractiveness would induce more positive attitude toward exit behavior in relationships (e.g., negative attitude and intention to break down the relationship such as employer-employee relationship, romantic relationship, buyer-supplier relationship). In this case, it is logical to propose that:

H_6 : Alternative attractiveness is positively related to attitude toward switching.

Another category-specific factor is ease of identifying service outcome quality. Ease of identifying

service outcome quality is defined as the extent or degree of ease in the evaluation of the quality of the outcome of using a particular service. The unique characteristics of services (i.e., intangibility, inseparability, heterogeneity, and perishability) make them more difficult for customers to evaluate the outcome of using services than to evaluate the outcome of using goods (Lamb, Hair, and McDaniel 1996). Among the services, customers also find that there is different degree of ease or difficulty in evaluating different categories of services (Powpaka 1996).

Powpaka (1996) developed a classification scheme for services based on the attribute qualities framework (Darby and Karni 1973; Nelson 1970) of search, experience, and credence qualities. As mentioned earlier in the service classification section, Powpaka (1996) used the degree of ease of identifying service outcome quality as the classifying variable. This contention is supported by Murray and Schlacter's (1990) study. Murray and Schlacter (1990) found that purchase of a credence service is perceived as riskier for service customers because they cannot judge the goodness (i.e., outcome quality) of using the service. One of the strategies customers use in this situation is brand loyalty or conversely, unwillingness to switch service providers. In other words, Murray and Schlacter (1990) imply that there is a relationship between the customers' responses (e.g., beliefs, attitudes, and behavior intention) and the degree of difficulty, or conversely, ease of judging the outcome quality of using the service. As such, it is proposed that:

H_7 : Ease of identifying service outcome quality is positively related to attitude toward switching.

The conceptual model also include two personal characteristics as the antecedents of attitude toward switching. A great deal of previous research has established the effect of personality traits such as innovativeness and opinion leadership on switching behavior (King and Summers 1970; Midgley and Dowling 1978; Myers and Robertson 1972; Reynolds and Darden 1971; Rogers 1983). It is generally accepted that these two personality traits are related but separated constructs (Rogers 1983) and that both of them are domain-specific (Goldsmith and Hofacker 1991; King and Summers 1970; Midgley and Dowling 1978; Myers and Robertson 1972; Reynolds and Darden 1971).

It is proposed in this study that innovativeness has a direct effect on attitude toward switching because the major characteristics of innovators are venturesome and open-mindedness (Midgley and Dowling 1978; Rogers 1983). They have high rationality and ability to deal with abstraction or to be creative. They also have more favorable attitudes toward change (e.g., brand switching), education, and science. As such, it is proposed that:

H_8 : Innovativeness is positively related to attitude toward switching.

According to Rogers (1983), opinion leaders are innovative and positive about innovations. They are also more interested in the topic under discussion than others. The main difference between opinion leaders and innovators is that the former gives out a lot of opinions and advice while the latter do not. It is logical to propose that opinion leaders in a particular service category are innovative and have positive attitudes toward change for that category. As such, it is proposed that:

H_9 : Opinion leadership is positively related to attitude toward switching.

2.4 Summary

This chapter first presents a review of relevant studies that lead to the conceptual model of the customer's service switching behavior model. Specifically, literature concerning (1) unique characteristics of services, (2) classification of services, (3) measurement of service quality, (4) past studies in service switching behavior, and (5) characteristics of switchers are first reviewed. The limitations of past studies are then discussed. Next, the conceptual model is proposed and each of the constructs included in the model is defined. Finally, the causal relationships specified in the model are discussed and the hypotheses are proposed.

Chapter III

METHODOLOGY

3.0 Overview

This chapter covers the methodology used to test the hypotheses proposed in Chapter II. Specifically, research strategy, design, sample, and the data collection procedure will be discussed in the first section. The second section discusses the operationalization of constructs included in the service switching models. The statistical techniques used will be discussed in the third section. And finally, the research activities will be discussed in the last section of this chapter.

3.1 Research Methodology

3.1.1 Research Strategies and the Three-Horned Dilemma

All research evidence involves some populations (here, A, for Actors) doing something (here, B, for Behavior) in some time/place/thing setting (here, C, for Context). It is always desirable (ceteris paribus) to maximize: (a) *generalizability* with respect to populations, (B) *precision* in control and measurement of variables related to the behavior(s) of interest, and (C) existential *realism*, for participants, of the context within which those behaviors are observed. According to McGrath (1982), however, these three desiderata (i.e., generalizability, precision, and realism) are always in conflict. The very choices and operations by which one seek to maximize any one of those

desiderata will reduce the other two; and the choices that would "optimize" on any two will minimize on the third. Thus, the research strategy domain is a three-horned dilemma, and every research strategy either avoids two horns by an uneasy compromise but gets impaled, to the hilt, on the third; or it grabs the dilemma boldly by one horn, maximizing on it, but at the same time suffering some weaknesses on the other two horns.

3.1.2 The Research Strategy Chosen for This Study

In his insightful article, McGrath (1982) contends that the research process teems with dilemmas involving the need to maximize simultaneously two or in some cases three conflicting desiderata. In other words, no research strategy, design, or method used alone is sufficient. As a result, a research program of multiple approaches is required (i.e., at the method level, within study for each construct; at the design and strategy and strategy level, between studies) for the crucial purpose of compensating for inherent limitations that any one method, strategy, or design would have if used alone. This study was the first of such a program, which consists of (1) a survey aiming at optimizing, at the same time, both generalizability and precision, (2) a laboratory experiment aiming at maximizing precision and control, and (3) a survey aiming at maximizing generalizability (using diverse samples and diverse services).

Since the objective of this study was to propose and empirically test a "general" service switching model (or a service switching model that is applicable to various service industries), both precision of measurement and generalizability of the results were the desirable aspects of the research design.

Precision of measurement was important in this study because of the need to test the hypothesized causal relationships specified in the conceptual model. Generalizability was important because of the need for generalization of the results to various service industries.

3.1.3 The Design

In order to gain precision of measurement, "noise" due to different background variables (i.e., demographics) must be reduced. This reduction can be achieved by applying mode K or "holding some background variables (e.g., demographics) constant" to the sample (McGrath 1982). The larger number of the variables being held constant, the more homogeneous is the sample. As such, a very homogeneous sample would be needed for this study to gain high precision of measurement. On the other hand, generalizability can be gained by using a representative sample of the customers of all services.

From the above discussion, it is clear that there is a conflict between the two desirable aspects of research design in this study. The very operation that maximizes precision of measurement is the very operation that reduces the generalizability of the results, and vice versa. It is clear that a compromise in the design is needed. As a result, a survey using university students (which can be considered as a relatively homogeneous sample in terms of demographic and psychographic background) as sample and three services (which represented three major categories of services) as stimuli was chosen as the research design of this study. This design would optimize both precision of measurement and generalizability across different service industries although it would have

serious problems in existential realism and generalizability of results across different segments of the market.

3.1.4 The Sample

A total of 541 male and female undergraduate students at The Chinese University of Hong Kong participated in this study. About 63% of the subjects were females. The age ranged from 18 to 25 with an average, mode, and median age of 21.06, 21, and 21 years, respectively. The subjects were randomly given one of the three versions of the self-administered questionnaire, each of which containing questions for each of the three services: search services (fastfood restaurants), experience services (hair salons), and credence services (banks). Based on the complete and usable questionnaires, there were 178 respondents in the search services, 173 respondents in the experience services, and 190 respondents in the credence services.

Generally, the use of students subjects has been criticized for two reasons. Firstly, students may be an inappropriate demographic group in terms of their experience with, or knowledge of the product/service class being investigated. Secondly, the student sample is not randomly selected but is, in fact, a convenience sample. As such, there is no statistical grounds for generalizing the findings.

In response to the first criticism, it can be argued that university students are not an inappropriate demographic group for services (fastfood restaurants, hair salons, banks) included in this study. In

fact, they are a major target segment for all these three service industries. Because of time limitation, many university students eat frequently at fastfood restaurants. They also spend considerable amount of income on hair care at hair salons. Finally, almost all university students here in Hong Kong have saving and/or checking accounts at banks.

In response to the second criticism, Calder, Phillips, and Tybout (1981, 1982, 1983) argue that, if the purpose of the research is theory testing as opposed to generalization, it is acceptable to use student subjects. It is a rigorous test of the theory if proper methodological procedures are followed. This issue will be discussed further addressed in the limitation section.

3.1.5 The Data Collection Procedure

A total of 541 undergraduate university students participated in the main study. The respondents were invited into a classroom and randomly given one of the three versions of a self-administered questionnaire, each of which represented one of the three services: fastfood restaurants, hair salons, and banks. First the respondent was asked to name the service provider in his or her service category that he or she had visit most regularly during the period of three months prior to the study. Then the respondent was asked to answer a series of questions about his or her perceptions, attitudes, intention, etc. regarding the service provider he or she had named. After the respondent completed the questionnaire, he or she was debriefed about the objective of the study and were asked not to discuss about the study or the content in the questionnaire with other students. A sample questionnaire is shown in the Appendix.

3.2 Operationalization of Constructs

It is hypothesized in this study that intention to switch from the current service provider to another service provider is determined by two attitudes, attitude toward the current service provider and attitude toward switching behavior. Attitude toward the current service provider, in turn, is influenced by the outcome quality component (service outcome quality) and the process quality components (tangibles, reliability, responsiveness, assurance, and empathy) of the service transaction. Attitude toward switching, on the other hand, is influenced by attitude toward the current service provider, innovativeness, opinion leadership, alternative attractiveness, and ease of identifying service outcome quality. There are altogether thirteen constructs in the conceptual model. The operationalization of these constructs is discussed below.

Service Outcome Quality. As discussed earlier in the literature review in Chapter II, service outcome quality is defined in this study as the customer's perception of the quality of what was delivered to him or her as a result of purchasing and using a service. The scale for measuring service outcome quality was derived from the scale developed by Powpaka (1996). Service outcome quality was measured by a 3-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "The quality of service I get from *XYZ* is excellent."

Service Process Quality. As discussed earlier, process quality is defined in this study as the customer's perceptions regarding the quality of the manner in which the customer received the service from the service provider. In other words, process service quality concerns with what

happens in the transaction between the customer and the service provider. According to Parasuraman, Zeithaml, and Berry (1988), there are five process quality attributes: tangibles, reliability, responsiveness, assurance, and empathy.

There are two popular measurement scales for measuring process quality attributes: SERVQUAL (Parasuraman, Zeithaml, and Berry 1988) and SERVPERF (Cronin and Taylor 1992). In this study, the scale items for measuring process quality attributes were selected from those of the SERVPERF scale because emerging literature has largely supported the performance-based SERVPERF paradigm over the disconfirmation-based SERVQUAL paradigm (Babakus and Boller 1992; Boulding et al. 1993; Mangold and Babakus 1991; Peter et al. 1992).

A pretest was conducted to assess the quality of the 22 performance-based item of the SERVPERF scale. On the basis of either the low item-total correlations or evidence of an item potentially cross-loading on two or more factors, six items were eliminated. Specifically, one item each was deleted from the scales of assurance and empathy, and two items were from the scale of reliability responsiveness. The detail for the operationalization of the five process quality attributes is shown below.

Tangibles. Tangibles is defined in this study as the physical aspect of service such as equipments, facilities, and employee's dress and appearance. Tangibles were measured by a 4-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "*XYZ* has up-to-date equipment."

Reliability. Reliability is defined in this study as the dependability of the employees in performing the service according to what is promised. Reliability were measured by a 3-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "When *XYZ* promises to do something by a certain time, it does so."

Responsiveness. Responsiveness is defined in this study as the promptness of the employees in responding to customers. Responsiveness was measured by a 2-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "I do not receive prompt service from the employee of *XYZ*."

Assurance. Assurance is defined in this study as the feelings of trust and confidence that the customer obtains in transacting with the employees. Assurance was measured by a 3-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "I can trust the employee of *XYZ*."

Empathy. Empathy is defined in this study as the attention and understanding that the customer receives from the employees. Empathy was measured on a 4-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "Employees of *XYZ* do not give you personal attention."

Ease of identifying service outcome quality. Ease of identifying service outcome quality is defined in this study as the degree of ease in the evaluation of the outcome quality of purchasing and

using a service. Ease of identifying service outcome quality was measured on a 3-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." Note that this scale was specifically developed for use in this study. Three items were generated for the construct based on their appropriateness, uniqueness, and ability to convey to respondents "different shade of meaning" (see Churchill 1979). A sample item is "It is very difficult to evaluate the outcome quality of using *XYZ*'s service.

Alternative attractiveness. Alternative attractiveness is defined in this study as the perceived service quality of the alternatives (i.e., other service providers) available to an individual customer. Alternative attractiveness was measured by a 2-item, 7-point Likert scale anchored at "strongly disagree" and "strongly agree." Note that this scale was also specifically developed for this study. Two items were generated for the construct based on their appropriateness, uniqueness, and ability to convey to respondents "different shade of meaning" (see Churchill 1979). A sample item is "The quality of services provided by companies other than *XYZ* is excellent."

Innovativeness. Innovativeness is defined in this study as the degree in which an individual is relatively early or late in adopting an innovation. The scale for measuring innovativeness was derived from the scale developed by Goldsmith and Hofacker (1991). As in the case of scales for process quality attributes, some items were eliminated on the basis of either the low item-total correlations or evidence of an item potentially cross-loading on two or more factors. Innovativeness was measured by a 4-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "In general, I am among the first of my circle of friends to try a new (fastfood

restaurant/hair salon/bank) when it appears."

Opinion leadership. Opinion leadership is defined in this study as the extent to which an individual gives information about a topic to others. The scale for measuring opinion leadership was derived from the scale developed by Reynolds and Darden (1971). As in the case of scales for measuring process quality attributes and innovativeness, some items were eliminated on the basis of either the low item-total correlations or evidence of an item potentially cross-loading on two or more factors. Innovativeness was measured by a 4-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." A sample item is "My friends often ask for my advice about (fastfood restaurants/hair salons/banks)."

Attitude toward the current service provider. Attitude toward the current service provider is defined in this study as the customer's favorable or unfavorable predisposition or overall evaluation toward his or her current service provider. Attitude toward the current service provider was measured by a 3-item, 7-point semantic differential scale. Note that this scale was specifically developed for use in this study. Three items were generated for the construct based on their appropriateness, uniqueness, and ability to convey to respondents "different shade of meaning" (see Churchill 1979). Scale anchors are negative/positive, favorable/unfavorable, like/dislike. A sample item is "My overall attitude toward XYZ is very _____."

Attitude toward switching. Attitude toward switching is defined in this study as the customer's favorable or unfavorable predisposition or overall evaluation toward switching from his

or her current service provider to another service provider. Attitude toward switching was measured by a 3-item, 7-point semantic differential scale. Note that this scale was specifically developed for use in this study. Three items were generated for the construct based on their appropriateness, uniqueness, and ability to convey to respondents "different shade of meaning" (see Churchill 1979). Scale anchors are negative/positive, favorable/unfavorable, like/dislike. A sample item is "My overall attitude toward switching from *XYZ* to another (fastfood restaurant/hair salons/banks) is very _____."

Intention to switch. Intention to switch is defined the customer's intention to switch from the current service provider to another service provider. Intention to switch was measured on a 3-item, 7-point Likert scale anchored at "strongly disagree" to "strongly agree." Note that this scale was specifically developed for use in this study. Three items were generated for the construct based on their appropriateness, uniqueness, and ability to convey to respondents "different shade of meaning" (see Churchill 1979). A sample item is "I am considering switching from XYZ to another (fastfood restaurant/hair salon/bank)."

3.3 Statistical Analysis

3.3.1 The Scale Assessment

Since multiple-item scales were used in this study, it is important that to assess whether or not each of the scales is acceptably unidimensional. Unidimensionality refers to the existence of a single trait

or construct underlying a set of measures (Hattie 1985; McDonald 1981). The paradigm proposed by Gerbing and Anderson (1988) was used in the assessment of unidimensionality of the scales in this study. According to Gerbing and Anderson's (1988) paradigm, item total correlations or exploratory factor analysis are used to provide preliminary scales. The unidimensionality of each scale then is assessed simultaneously with confirmatory factor analysis. The reason is that a confirmatory factor analysis makes possible an assessment of the internal consistency *and* external consistency criteria of unidimensionality implied by the multiple-indicator measurement model. Note that exploratory factor analysis is used to provide preliminary scales for this study.

3.3.2 Structual Equation Modeling

To test the hypothesized relationships among constructs specified in the conceptual model, a structural modeling approach was employed. This approach was selected to analyze the data because a structural equation model can be used to specify and test the phenomenon under study in terms of hypothesized cause-and-effect variables and their indicators. Because each equation in the model represents a causal link rather than a mere empirical association, the structural parameters do not, in general, coincide with coefficients of regressions among observed variables. Instead, the structural parameters represent relatively unmixed, invariant and autonomous features of the mechanism that generates the observed variables. The structural equation modeling program used in this study was PRELIS 2 (Jöreskog and Sörbom 1988) and LISREL 8 (Jöreskog and Sörbom 1993).

The collected data were input into PRELIS 2, which generated the covariance matrices for the structural equation analyses. These matrices, in turn, were input into LISREL 8. Generally, a LISREL model consists of two models: the measurement model and the structural model. The measurement model specifies how the latent variables or hypothetical constructs are measured in terms of the observed variables, and it describes the measurement properties (validity and reliability) of the observed variables. The structural model, on the other hand, specifies the causal relationships among the latent variables and describes the causal effects and the amount of unexplained variance.

In this study, five structural equation modelings were performed: two models (full model and modified model) for all services combined, one for search services (fastfood restaurants), one for experience services (hair salons), and one for credence services (banks). The objective of doing so was to determine whether or not the conceptual model is applicable to different service industries.

3.4 Research Activities

3.4.1 Pretest for Selection of Services for the Study

The purpose of this step was to identify service industries to represent search, experience, and credence services. A sample of 72 university students were recruited for this step. They were exposed to ten service industries including banks, concerts, credit card services, fastfood restaurants, hair salons, hotels, life insurance, paging service, theaters, and package tours. Then they were asked to select one out of the three statements that best described each of the service industries. The three

statements, which were the description of search, experience, and credence services, were: (1) It is the service that the outcome of using the service can be accurately and efficiently evaluated by you even before purchase (search services); (2) It is the service that the outcome of using it can be accurately and efficiently evaluated by you only after the service have been purchased and consumed for a short period of time (experience services); and (3) It is the service that the outcome of using it cannot be accurately and efficiently evaluated by you even after the service have been purchased and consumed extensively (credence services).

The data collected were analyzed by the Chi-square test (see Table 1). Results show that there were significant differences the number of respondents in each category of services for each service industry. The choice of a service industry to represent a service category was based on the frequency of votes by the respondents. The choice procedure was as follow: First, each service industry was identified as either a search, experience, or credence service depending on the most vote it got. If there were more than one industries for a particular category, these services were then compared to identify the winner.

Table 1 shows that fastfood restaurants was the only service industry that was identified by the respondents as a search service (40 out of 72 or 55.56%), it was automatically chosen to represent search services in this study. For credence services, there were two service industries, life insurance (40 out of 72 or 55.56%) and banks (29 out of 72 or 40.28%), that were identified as credence services. The rest of the services were identified by the respondents as experience services with package tours (57 out of 72 or 79.17%) and hair salons (55 out of 72 or 76.39%) as the two

industries with the most votes.

Although package tours received a higher score, hair salons were selected as a representative for experience services for the study because one of the design criteria was to study services that people use frequently enough to be able to judge the service accurately. In other words, the services to be included in this study should be the services that people would use at least once during the period of three months prior to the study. Informal interviews showed that virtually every student used the service during the three months prior to the data collection. For package tours, most students bought package tours on an annual or semi-annual basis and many of them had not bought the services during the period of three months prior to the study. Besides, hair salons and package tours got very close votes. There should not be any problem using hair salons instead of package tours.

There was a problem, however, in selecting a service industry to represent credence services for university students. According to the results of the pretest, life insurance got the most votes for credence service category (40 out of 72 or 55.56%). The problem, which was discovered later, was that most university students in Hong Kong did not have life insurance policies. It would be extremely difficult if not impossible to collect sufficient data for this service industry. As a result, banks, which were the only service industry other than life insurance that was identified as a credence service, was chosen to represent the credence service category. This choice was also supported by Powpaka's (1996) findings. In his study, Powpaka (1996) found that banking services were considered by his Hong Kong respondents as credence services.

3.4.2 Pretest of the Questionnaire

The objective of this step was to test the appropriateness of the three versions of questionnaires that would be used for the three different services. A group of 90 Hong Kong university students were asked to respond to the draft questionnaires, 30 students for each version. Then they were individually asked to point out the questions or wordings that they did not understand or were unclear to them. Based on the comments collected from these respondents, the final questions were obtained.

3.4.3 The Main Study

In the main study, the respondents were randomized into one of the three services: fastfood restaurants, hair salons, and banks. A particular version of self-administered, close-ended questionnaires was given to each respondents according to his or her service. First the respondent was asked to name the service provider in his or her service category that he or she had visit most regularly during the period of three months prior to the study. Then the respondent was asked to answer a series of questions about his or her perceptions, attitudes, intention, etc. regarding the service provider he or she had named. After the respondent completed the questionnaire, he or she was debriefed about the objective of the study and were asked not to discuss about the study or the content in the questionnaire with other students.

3.5 Summary

This chapter presented the research methodology and design used in this study. Issues of research strategy, design, sample and sampling procedure, data collection procedure, operationalization of constructs, and statistical analysis to be used were discussed. Specifically, a survey using university students as sample and three service industries as stimuli was selected as the research design for this study. The rationale for this choice is concerned with the need to optimize both precision of measurement and control and generalizability of the results.

There were two pretests in this study: one to identify services to be included in the study and the other to test the appropriateness of the questionnaires. In the main study, a total of 541 undergraduate university students participated were recruited and randomly assigned into one of the three services. All together, thirteen latent variables (including service outcome quality, tangibles, reliability, responsiveness, assurance, empathy, ease of identifying service outcome quality, alternative attractiveness, innovativeness, opinion leadership, attitude toward the current service provider, attitude toward switching, and intention to switch) were measured. The collected data were analyzed by structural equation modeling using PRELIS 2 and LISREL 8. The chapter ended with the outline of research activities of this study.

Chapter IV

ANALYSIS AND DISCUSSION OF RESULTS

4.0 Overview

This chapter discusses the results of the data analysis. First, the scales developed and used in this study will be assessed. Specifically, the unidimensionality and the reliability of the constructs included in the conceptual model will be discussed. This will be followed by the discussion of the results of the structural equation modeling in terms of measurement model evaluation and structural model results. Altogether the structural equation modeling of four models (three services combined, fastfood restaurants, hair salons, and banks) will be discussed.

4.1 Scale Assessment

According to Gerbing and Anderson's (1988) paradigm of scale development, the researcher must first establish the unidimensionality of the scales. After the unidimensionality of the scales has been acceptably established, he/she would assess its reliability. The scale assessment in this way is important because the goal of most research projects is not just to develop unidimensional and reliable measurement scales, but to build and test theory. Essential to this undertaking is the assessment of construct validity. A construct achieves its meaning in two ways (Anderson 1987; Cronbach and Meehl 1955): (1) through observed indicators for which it is posited to be causally antecedent (and through observed measures for which it is *not*) and (2) through the set of

relationships of the constructs with other constructs as specified by some theory (the nomological network). Unidimensionality, then, is necessary but not sufficient for construct validity. Not only should all the indicators that define a scale provide estimates of exactly one factor, but the meaning of the underlying factor should correspond to the construct of interest. Note that the nomological network can be explored within the context of the full structural equation model.

4.1.1 Unidimensionality of the Constructs

Since multiple-item scales were used in this study, it is important that to assess whether or not each of the scales is acceptably unidimensional. Unidimensionality refers to the existence of a single trait or construct underlying a set of measures (Hattie 1985; McDonald 1981). The paradigm proposed by Gerbing and Anderson (1988) was used in the assessment of unidimensionality of the scales in this study. According to Gerbing and Anderson's (1988) paradigm, item-total correlations and exploratory factor analysis are used to provide preliminary scales. The unidimensionality of each scale then is assessed simultaneously with confirmatory factor analysis. The reason is that a confirmatory factor analysis makes possible an assessment of the internal consistency *and* external consistency criteria of unidimensionality implied by the multiple-indicator measurement model.

4.1.1.1 Exploratory Factor Analyses

Two exploratory factor analyses were performed on the observed variables included in the study: one for items operationalized to represent the exogenous constructs and the other for the items

operationalized to represent the endogenous constructs. Table 2 and Table 3 show the results of the principal component factor analyses using varimax rotation. Specifically, ten factors were extracted from the 32 observed variables for the exogenous constructs and three factors were extracted from the 9 observed variables for the endogenous constructs. Based on the factor loadings, all of the constructs included in the conceptual model seem to be unidimensional. All of the observed variables load highly on the constructs they were operationalized to measure.

4.1.1.2 Confirmatory Factor Analyses

Two confirmatory factor analyses (CFAs) using the LISREL 8 program (Jöreskog and Sörbom 1993) were also performed in this study: one for exogenous constructs and the other for endogenous constructs. Results in Table 4 and Table 5 show that there are decided lacks of fit based on the chi-square statistic for the confirmatory factor analysis of both exogenous constructs ($\chi^2_{418} = 1{,}081.01$, $p = 0.0$) and endogenous constructs ($\chi^2_{24} = 102.30$, $p = 0.0$). A major criticism of the χ^2 measure is that it is too sensitive to sample size differences, especially in cases where the sample size exceeds 200 respondents (Hair, Anderson, Tathum, and Black 1995). Since the sample size for this study is 541, it is very likely that the χ^2 measure will be significant. As such, χ^2 measure should be used only as a guide rather than an absolute index of fit.

Since it is generally agreed that chi-square test should be used as a guide rather than an absolute index of fit (Bagozzi 1981; Bearden, Sharma, and Tell 1982; Fornell and Larcker 1981), other diagnostics need to be examined. Measures of absolute fit such as goodness-of-fit index or GFI

(Jöreskog and Sörbom 1989) and incremental fit measures such as adjusted goodness-of-fit index or AGFI (Jöreskog and Sörbom 1989), normed fit index or NFI (Bentler and Bonett's 1980), comparative fit index or CFI (Bentler 1990), and incremental fit index or IFI (Bollen 1989) were used to assess the fit of the models.

The CFA model for endogenous constructs shows adequate fit in all of the fit measures (GFI=0.96, AGFI=0.93, NFI=0.97, CFI=0.98, and IFI=0.98). As such, it is fair to conclude that the scales for the endogenous constructs are unidimensional. The CFA model for exogenous constructs, however, shows adequate fit only in CFI (0.92) and IFI (0.92) but not in GFI (0.89), AGFI (0.86) and NFI (0.87). However, these three indices are very close to 0.90. One of the possible reason for marginal fit of the exogenous model may due to the fact that the reliability of two exogenous constructs (see next section), responsiveness and alternative attractiveness, is lower than the acceptable level of 0.70 (Nunnally 1978). As such, it is fair to conclude that the scales for the exogenous constructs are marginally unidimensional.

4.1.2 Reliability

Unidimensionality alone is not sufficient to ensure the usefulness of a scale. According to Gerbing and Anderson's (1988) scale development paradigm, the reliability of the composite scores should be assessed after unidimensionality has been acceptably established. Even a perfectly unidimensional (and otherwise construct valid) scale would be of little or no practical use if the resultant composite score were determined primarily by measurement error, with the values of the

scores widely fluctuating over repeated measurements.

Coefficient alpha (Cronbach 1951) was used to assess the reliability of the constructs in this study. Results in Table 4 (exogenous constructs) and Table 5 (endogenous constructs) show that reliability levels for the constructs are moderate to high (ranging from 0.5042 to 0.9069). Reliabilities of all but two exogenous constructs, responsiveness (α=0.5042) and alternative attractiveness (α=0.6426), exceed 0.70, the threshold Nunnally (1978) recommends for exploratory research. As such, it is reasonable to conclude that the majority of the constructs included in the conceptual model (11 out of 13 constructs) are reliable. Since the reliability of responsiveness and alternative attractiveness is lower than the threshold of 0.7, they should be dropped from the model. However, they were kept in the model for substantive reason. In other words, both constructs were kept because the objective of this study is to test the conceptual model of service switching behavior. As such, the results of the structural modeling will be analyzed and interpreted with care especially when either or both of these two constructs have significant impact on their hypothesized dependent construct, attitude toward the current service provider.

4.2 Structural Equation Modeling

Five structural equation modeling analyses were performed in this study: two for all services combined (full and reduced models), one for fastfood restaurants (search services), one for hair salons (experience services), and one for banks (credence services). Specifically, data from all services combined were analyzed based on the conceptual model proposed in the study. Based on

the findings, a modified (reduced) model was then derived. Since the proposed conceptual model was hypothesized to be a general model of service switching, the reduced model was then used to analyze the data of each category of services to verify the model's reliability and validity.

For each of the structural equation modeling analyses, the discussion of results proceeds in the two stages. First, the measurement model results are examined. The structural model findings including the model fit and the causal relations among constructs are then discussed.

4.2.1 The Structural Equation Models for All Three Services Combined

4.2.1.1 The Full Model for All Three Services Combined

The Measurement Model Evaluation

The measurement model specifies how the latent variables or hypothetical constructs are measured in terms of the observed variables, and it describes the measurement properties (validities and reliabilities) of the observed variables. A good measurement model should have high and statistically significant indicator coefficients (λ^xs and λ^ys), high reliabilities, and high validities (e.g., high proportion-of-variance extracted indices).

The indicator coefficients (i.e., standardized factor loadings), reliabilities, and proportions of variance extracted for the constructs for the measurement model are presented in Table 6, Part A.

The first item of each construct was fixed at 1.00 for the scaling purpose. This was done to create scales for the constructs, which were latent (or unobservable). The indicator coefficients of the constructs are generally high and all are statistically significant ($p<0.01$, 1-tailed). Reliability levels for the constructs are moderate to high (ranging from 0.5042 to 0.9069). Reliabilities of all but two exogenous constructs (responsiveness and alternative attractiveness) exceed 0.70, the threshold Nunnally (1978) recommends for exploratory research. These two constructs, as mentioned earlier in the scale development section, are kept in the model for substantive reasons. The more conservative proportion-of-variance extracted index (Fornell and Larcker 1981), which indicates the amount of variance captured by a construct in relation to the amount of variance due to the measurement error, demonstrates relatively low to moderately high validity (ranging from 0.4000 to 0.7900) for the measurement model. The indices of all but one constructs (responsiveness) exceed the minimal standard of 0.50, which indicates that the variance captured by the constructs exceeds the variance due to measurement error (Fornell and Larcker 1981). Responsiveness, however, is still included in the model for substantive reason.

Since all of the indicator coefficients (λ^xs and λ^ys) are generally high and statistically significant and the reliabilities and validities of most constructs exceed the minimal standards, it is reasonable to conclude that the measurement model for full model for all three services combined is acceptable.

The Structural Model Results

The Model Fit. The structural equation model specifies the causal relations among the latent

variables and describes the causal effects and the amount of unexplained variance. An initial matter is whether or not the maximum likelihood estimate for the structural equation model provides a satisfactory fit to the data. The Chi-square value (see Table 6, Part B) indicates that the model, even after modification (by letting the error variance of x_{16} and x_{17} correlate), does not adequately account for the relationship between the observed sample covariance and the hypothetical population covariance (χ^2_{418}=1,845.13, p=0.0). Since it is generally agreed that χ^2 should be used as a guide rather than an absolute index of fit (Bagozzi 1981; Bearden, Sharma, and Teel 1982; Fornell and Larcker 1981), other diagnostics need to be examined. Two widely used goodness-of-fit measures are GFI (goodness-of-fit index) and AGFI (adjusted goodness-of-fit index) (Jöreskog and Sörbom 1989). The GFI and AGFI of the structural model are 0.86 and 0.83, respectively. According to the heuristics (Jöreskog and Sörbom 1989), an acceptable model should have a GFI and an AGFI of 0.90 and over. As such, the structural model is not acceptable according to these two measures of fit. Note that these two indices do not depend on sample size explicitly and measure how much better the model fits as compared to no model at all. This is a problem, however, because even though GFI and AGFI do not depend on sample size explicitly in their calculation, their sampling distributions will depend on the sample size. Maiti and Mukherjee (1990) demonstrate that there is an exact monotonic relationship between GFI and Chi-square. In this case, incremental fit indices such as Bentler and Bonett's (1980) normed fit index (NFI), Bentler's (1990) comparative fit index (CFI), and Bollen's (1989) incremental fit index (IFI), which are fit indices measuring how much better the model fits as compared to a baseline model (i.e., an independent model), are particularly useful.

The NFI, CFI, and IFI, which were calculated based on the chi-square value of the independence

model with 820 degrees of freedom (χ^2_{820}=13,107.55, p=0.0), are 0.86, 0.91, and 0.91, respectively. According to Bentler and Bonett's (1980), Bentler's (1990), and Bollen's (1980) heuristics, model fits of less than 90 percent are considered inadequate. As such, although the model cannot be considered as adequate according to the NFI (0.86), it can be considered adequate according to CFI (0.91) and IFI (0.91). Since two out three incremental goodness of fit measures indicate that the model is acceptable, the model can be considered as marginally adequate.

Causal Relationships among the Constructs. Since the model fit can be considered as marginally adequate, we now turn to the structural parameter estimates. It was hypothesized in this study that intention to switch from the current service provider to another is the function of attitude toward the current service provider (H_1) and attitude toward switching (H_2). Attitude toward the current service provider, on the other hand, is the function of service outcome quality (H_4) and service process quality components including tangibles (H_{5a}), reliability (H_{5b}), responsiveness (H_{5c}), assurance (H_{5d}), empathy (H_{5e}). Finally, attitude toward switching is the function of attitude toward the current service provider (H_3), ease of identifying outcome quality (H_6), alternative attractiveness (H_7), innovativeness (H_8), and opinion leadership (H_9).

Results (see Table 6, Part B) show that both attitude toward the current service provider (β_{31}=-0.25, p<0.01, 1-tailed) and attitude toward switching (β_{32}=0.79, p<0.01, 1-tailed) are the significant determinants of intention to switch from the current service provider to another as hypothesized. The proportion of variance explained or R^2 of the function is 0.65.

For attitude toward the current service provider, results (see Table 6, Part B) show that only service outcome quality (γ_{11}=0.72, p<0.01, 1-tailed) and responsiveness (γ_{14}=0.38, p<0.01, 1-tailed) are the significant determinants of the attitude. Tangibles (γ_{12}=0.074, p>0.25, 1-tailed), reliability (γ_{13}= -0.0025, p>0.25, 1-tailed), assurance (γ_{15}=0.075, p>0.25, 1-tailed), and empathy (γ_{16}=0.046, p>0.25, 1-tailed) are not the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.79.

For attitude toward switching, results (see Table 6, Part B) show that alternative attractiveness (γ_{27}=0.51, p<0.01, 1-tailed), innovativeness (γ_{28}=0.14, p<0.05, 1-tailed), and attitude toward the current service provider (β_{21}=-0.33, p<0.01, 1-tailed) are significant determinants of the attitude as hypothesized. Ease of identifying outcome quality (γ_{28}=0.0063, p>0.25, 1-tailed) and opinion leadership ($\gamma_{2,10}$=0.086, p>0.25, 1-tailed) are not the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.35.

Since the structural model fit of the conceptual model for all three services combined is, at best, marginal, and since several hypothesized relations are not supported, the next logical step is to modify the conceptual model to improve the model fit. This is accomplished by deleting insignificant factors from the original model (see Figure 2 for the modified/reduced model). The results of the modification is discussed in the next section.

4.2.1.2 The Modified (Reduced) Model for All Three Services Combined

Using the same structural equation modeling performed in the earlier section, it is found that both the measurement model and the model fit of the modified (reduced) model for all three services combined can be considered as marginally adequate. In terms of causal relations among the constructs, it is found that all of the relations specified in the reduced model are supported. Specifically attitude toward the current service provider (β_{31}=-0.25, p<0.01, 1-tailed) and attitude toward switching (β_{32}=0.79, p<0.01, 1-tailed) are the significant determinants of intention to switch from the current service provider to another. The proportion of variance explained or R^2 of the function is 0.65. For attitude toward the current service provider, results show that both service outcome quality (γ_{11}=0.82, p<0.01, 1-tailed) and responsiveness (γ_{12}=0.44, p<0.01, 1-tailed) are the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.82. Finally, results show that alternative attractiveness (γ_{23}=0.49, p<0.01, 1-tailed), innovativeness (γ_{24}=0.14, p<0.05, 1-tailed), and attitude toward the current service provider (β_{21}= -0.31, p<0.01, 1-tailed) are significant determinants of attitude toward switching as hypothesized. The proportion of variance explained or R^2 of the function is 0.35. See Table 7 for more detail about the results of this model.

Since the modified (reduced) model for all the three services combined shows adequate fit and all the relations specified in the model are significant, the next logical step is to test whether or not this "general" model can be applied to specific service industries. As such, we used the reduced model as the conceptual framework to analyze the data for each of the services included in this study. Results of these analyses are shown in the following sections.

4.2.2 The Structural Equation Model for Fastfood Restaurants

Using the same structural equation modeling performed in the two earlier models, it is found that both the measurement model and the model fit of the model for fastfood restaurants can be considered as marginally adequate. In terms of causal relations among the constructs, it is found that all except one of the relations (innovativeness-attitude toward switching) specified in the reduced model for fastfood restaurants are supported. Specifically, attitude toward the current service provider (β_{31}=-0.17, p<0.01, 1-tailed) and attitude toward switching (β_{32}=0.63, p<0.01, 1-tailed) are the significant determinants of intention to switch from the current service provider to another. The proportion of variance explained or R^2 of the function is 0.42. For attitude toward the current service provider, results show that both service outcome quality (γ_{11}=0.90, p<0.01, 1-tailed) and responsiveness (γ_{12}=0.44, p<0.01, 1-tailed) are the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.83. Finally, results show that alternative attractiveness (γ_{23}=0.49, p<0.01, 1-tailed) and attitude toward the current service provider (β_{21}= -0.31, p<0.01, 1-tailed) are significant determinants of attitude toward switching as hypothesized. Innovativeness (γ_{24}=-0.032, p>0.25, 1-tailed), on the other hand, is not the significant determinant of attitude toward switching. The proportion of variance explained or R^2 of the function is 0.22. See table 8 for more detail for this model.

4.2.3 The Structural Equation Model for Hair Salons

Using the same structural equation modeling performed in the earlier models, it is found that both

the measurement model and the model fit of the model for hair salons can be considered as marginally adequate. In terms of causal relations specified in the model, it is found that all except one of the relations (innovativeness-attitude toward switching) specified in the reduced model for hair salons are supported. Specifically, attitude toward the current service provider (β_{31}=-0.25, $p<0.01$, 1-tailed) and attitude toward switching (β_{32}=0.82, $p<0.01$, 1-tailed) are the significant determinants of intention to switch from the current service provider to another. The proportion of variance explained or R^2 of the function is 0.70. For attitude toward the current service provider, results show that both service outcome quality (γ_{11}=0.90, $p<0.01$, 1-tailed) and responsiveness (γ_{12}=0.51, $p<0.01$, 1-tailed) are the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.83. Finally, results show that alternative attractiveness (γ_{23}=0.65, $p<0.01$, 1-tailed) and attitude toward the current service provider (β_{21}= -0.27, $p<0.01$, 1-tailed) are significant determinants of attitude toward switching as hypothesized. Innovativeness (γ_{24}=-0.0096, $p>0.25$, 1-tailed), on the other hand, is not the significant determinant of attitude toward switching. The proportion of variance explained or R^2 of the function is 0.38. See Table 9 for more detail about this model.

4.2.4 The Structural Equation Model for Banks

Using the same structural equation modeling performed in the earlier models, it is found that both the measurement model and the model fit can be considered as marginally adequate. In terms of causal relations specified in the model, show that all of the relations specified in the reduced model for banks are supported. Specifically, attitude toward the current service provider (β_{31}=-0.27,

$p<0.01$, 1-tailed) and attitude toward switching ($\beta_{32}=0.82$, $p<0.01$, 1-tailed) are the significant determinants of intention to switch from the current service provider to another. The proportion of variance explained or R^2 of the function is 0.70. For attitude toward the current service provider, results show that both service outcome quality ($\gamma_{11}=0.52$, $p<0.01$, 1-tailed) and responsiveness ($\gamma_{12}=0.76$, $p<0.01$, 1-tailed) are the significant determinants of the attitude. The proportion of variance explained or R^2 of the function is 0.78. Finally, results show that alternative attractiveness ($\gamma_{23}=0.41$, $p<0.01$, 1-tailed), innovativeness ($\gamma_{24}=0.51$, $p>0.25$, 1-tailed) and attitude toward the current service provider ($\beta_{21}= -0.27$, $p<0.01$, 1-tailed) are significant determinants of attitude toward switching as hypothesized. The proportion of variance explained or R^2 of the function is 0.52. See Table 10 for more detail for this model.

4.3 Discussion

4.3.1 Results of the Service Switching Models for All Three Services Combined

From Table 6, it was found that not all hypotheses specified in the conceptual model are supported; seven out of the thirteen hypotheses were supported. Specifically, it was found that intention to switch from the current service provider to another is negatively affected by attitude toward the current service provider and positively by attitude toward switching. Attitude toward the current service provider, on the other hand, is positively affected by service outcome quality and responsiveness. Finally, attitude toward switching is positively influenced by alternative attractiveness and innovativeness and negatively influenced by attitude toward the current service

provider.

Based on the results, the modified (reduced) model of service switching was derived from the original (full) model by deleting the relations that were not significant in the original model. Results (see Table 7) show that the reduced model has a significant improvement in terms of model fit over the full model. Results also show that all the hypotheses specified in the reduced model, which were retained from the full model, were supported. As such, it is fair to conclude that the reduced model is superior to the original full model both in terms of fit and simplicity (parsimony).

4.3.2 Comparison of Structural Model Results of Overall Model and Individual Models

Since the reduced model was analyzed based on the data collected from three service industries, the model can be more or less considered as a "general" model for service switching. As such, it is logical to assume that the overall model is applicable for each individual industries. Table 8, 9, and 10 show the results for fastfood restaurants, hair salons, and banks, respectively. The measurement models and model fits of these three service industries can be considered as marginally adequate. Table 11 shows the comparison of the reduced models of the overall model (i.e., all services combined) and the individual models (i.e., fastfood restaurants, hair salons, and banks).

From Table 11, it is clear that the "general" model is generally applicable to individual industry. However, there are two major points to note for individual service industries. First, innovativeness is the significant determinant of attitude toward switching in banks but not in either fastfood

restaurants or hair salons. In fact, innovativeness is the most important determinant (i.e., it has the largest coefficient among the three determinants) of attitude toward switching in banks. This may be due to the fact that banks, as shown in the pretest, were considered by respondents as a credence service. By definition, a credence service is one of which outcome quality cannot be accurately and efficiently evaluated even after it has been purchased and consumed extensively. As a result, the customers may have more difficulty in evaluating attractiveness of alternatives and have to depend heavily on their own innovativeness to form their attitude toward switching. The customers of fastfood restaurants (a search service) and hair salons (a experience service), on the other hand, can accurately and efficiently evaluate the outcome of using the services. As a result, they may not need to depend on their innovativeness to form their attitude toward switching.

Second, between the two determinants of attitude toward the current service provider, service outcome quality has much more impact on the attitude than responsiveness in fastfood restaurants and hair salons. This is, however, reverse in banks; responsiveness has more impact on the attitude than service outcome quality. This phenomenon may also be explained by the fact that banks are a credence service. Since it is difficult for banks' customers to accurately and efficiently to evaluate the outcome quality of using the service, the customers may have to rely more on responsiveness in the formation of their attitude toward their banks.

Third, in terms of R^2 or proportion of variance explained, it is found that the R^2 of attitude toward current service provider function for banks (0.78) is lower than those of fastfood restaurants (0.83) and hair salons (0.83). In other words, outcome quality and responsiveness cannot explain the

variance of attitude toward the current service provider function for banks as good as they do for those for fastfood restaurants and hair salons. This may be due to the fact that, for banks, outcome quality of a credence service such as banks is difficult to judge by the customer.

As for the attitude toward switching function, it is found that the R^2s of the functions for fastfood restaurants, hair salons, and banks are 0.22, 0.38, and 0.52, respectively. The R^2 of the function for banks is highest possibly due to the fact that innovativeness is the significant determinant of attitude toward switching as hypothesized. Innovativeness, however, is not the significant determinant of attitude toward switching for fastfood restaurants and hair salons.

As for the intention to switch function, it is found that the R^2 of the function for fastfood restaurants (0.42) is lower than those of hair salons (0.70) and banks (0.70). In other words, attitude toward the current service provider and attitude toward switching cannot explain the variance of the function for fastfood restaurants as good as they do for those for hair salons and banks. This may be due to the fact that, for fastfood restaurants, there may be other significant determinant constructs that have not yet been included in the function. An example of such determinants is perceived risk. Typically, perceived risk tend to be lower in switching fastfood restaurants than in switching hair salons and banks. As such, perceived risk might play an important role in determining intention to switch from a fastfood restaurant to another fastfood restaurant but not in determining intention to switch from a hair salon or a bank to another hair salon or bank.

4.4 Summary

In this chapter, we first assessed the scales used in the study in terms of unidimensionality and reliability. This was followed by the discussion about the results of data analysis. Specifically, the results of the structural equation modeling of the full model (for all services combined) and the reduced models (for all service combined and for each of the three service industries) were discussed. Finally, the findings of the reduced models were compared and discussed.

Chapter V

CONCLUSION

5.0 Overview

Four topics will be discussed in this chapter: (1) summary of the research, (2) contribution of the research, (3) limitations, and (4) future research direction. Specifically, research objective, conceptual model and hypotheses, design, sample and sampling procedure, data collection, data analysis, and research results will be discussed in the first section. This is followed by discussion of theoretical contribution and managerial implication in the second section. In the third section, limitations due to the research process used in this study will be discussed. Finally, recommendations for future research will be discussed in the fourth section.

5.1 Summary of the Research

The objective of this study is to help both service managers and researchers understand service switching from the customer's perspective. Specifically, the objective of this study is to propose and empirically test a broader, cross-industry service switching model. This study also aims at overcoming limitations identified in the past study.

The model of service switching behavior proposed and tested in this study was conceptualized by using the *more contemporary view of attitudes* as the model framework. According to the model,

a customer's intention to switch from the current provider to another is a function of two attitudes: attitude toward the current service provider (H_1) and attitude toward switching (H_2). The customer's attitude toward the current service provider, in turn, is a function of service-related factors including outcome service quality (H_4) and process outcome quality including tangibles (H_{5a}), reliability (H_{5b}), responsiveness (H_{5c}), assurance (H_{5d}), and empathy (H_{5e}). The customer's attitude toward switching, on the other hand, is a function of the customer's personal characteristics (i.e., personality traits) including innovativeness (H_8) and opinion leadership (H_9), and service category-specific factors including ease of identifying the service outcome quality (H_6) and alternative attractiveness (H_7).

Since the objective of this study was to propose and empirically test a "general" service switching model (or a service switching model that is applicable to various service industries), both precision of measurement and generalization of the results were desirable aspects of research design. As such, a survey using university students as the sample and three services (i.e., fastfood restaurants, hair salons, and banks) representing three categories of services (i.e., search services, experience services, and credence services) as stimuli was chosen as the design of this study. This design would optimize both precision of measurement and generalizability across service industries. This design, however, would have problems of existential realism and generalizability of results to market segments other than the student segment.

The sampling frame for this study is the male and female undergraduate students. The sampling procedure used in this study is convenient sampling. A nonprobability sampling technique such as convenient sampling was chosen in this study because of the problem of practicality. In other words,

a probability sampling procedure such as simple random sampling could not be performed in this study because of the lack of the list of students to be used as the sampling frame. Without the sampling frame, it is not possible for us to perform probability sampling.

A total of 541 male and female undergraduate students participated in this study. The respondents were invited into a classroom and randomly given one of the three versions of a self-administered questionnaire, each of which represented one of the three services (i.e., fastfood restaurants, hair salons, and banks). First, the respondent was asked to name the service provider in his or her service category that he or she has visit most regularly during the past three months prior to the study. Then, the respondent was asked to answer a series of questions regarding his or her perceptions, attitudes, and intention to switch toward the service provider he or she had named earlier. As a result, 178, 173, and 190 complete questionnaires were collected for fastfood restaurants, hair salons, and banks, respectively.

In terms of data analysis, the scales used in this study were first assessed by the paradigm proposed by Gerbing and Anderson (1988). This was followed by structural equation modeling procedure using PRELIS 2 (Jöreskog and Sörbom 1988) and LISREL 8 (Jöreskog and Sörbom 1993) programs. Five structural equation modeling analyses were performed in this study: two models (full model and modified model) for all services combined, one for fastfood restaurants (search services), one for hair salons (experience services), and one for banks (credence services).

Results show that, based on Gerbing and Anderson's (1988) paradigm, all but two scales

(responsiveness and alternative attractiveness) of constructs included in the conceptual model were considered as adequate in terms of unidimensionality and reliability. The scales of reponsiveness and alternative attractiveness were considered as adequate in terms of unidimensionality but not in terms of reliability. The reliability of responsiveness and alternative attractiveness was equal to 0.5042 and 0.6426, respectively. There reliabilities were lower than 0.7, the threshold Nunnally (1978) recommends for exploratory research. These two constructs and their measurement scales, however, were included in the conceptual model for the substantive reason.

For structural equation modelings, results show that the measurement model and the model fit of the full model for all three services combined can be considered as marginally adequate. In terms of causal relations, it is found that intention to switch is negatively affected by attitude toward the current service provider and positively by attitude toward switching. Attitude toward the current service provider is, in turn, positively affected by service outcome quality and responsiveness. Attitude toward switching, on the other hand, is positively affected by alternative attractiveness and innovativeness.

The modified or reduced model for all three services combined was derived from the full model by deleting all of the insignificant relations from the original conceptual model. The measurement model and the model fit of the modified model for all three services combined can be considered as adequate. In terms of causal relations, it is found that all of the hypotheses specified in the model are supported. Specifically, intention to switch is negatively affected by attitude toward the current service provider and positively by attitude toward switching. Attitude toward the current service

provider is, in turn, positively affected by service outcome quality and responsiveness. Attitude toward switching, on the other hand, is positively affected by alternative attractiveness and innovativeness. This reduced model was then used as the framework to model service switching for each individual service industry included in this model.

Results show that the measurement model and the model fit of the model for fastfood restaurants, hair salons, and banks can be considered as marginally adequate. In terms of causal relations, it is found that all of the hypotheses specified in the model for banks are supported. All but one hypotheses (H_7: innovativeness-attitude toward switching) specified in the model are supported in the models for fastfood restaurants and hair salons. See Table 12 for the comparison of the results of the four models (i.e., model for all three services combined, model for fastfood restaurants, model for hair salons, and model for banks).

5.2 Contributions of the Research

5.2.1 Theoretical Contributions

The objective of this study is to help managers and researchers understand service switching from the customer's perspective. This study represents an attempt to propose and empirically test a "general" conceptual model of service switching based on the customer's psychological process (i.e., more contemporary view of attitudes). This study has also been conceptualized and designed to overcome the limitations of the past studies in service switching. As such, this study makes

theoretical contributions to the area of service switching by providing a empirically tested conceptual model of service switching and addressing four limitations of past studies.

As such, the first theoretical contribution of this study is the conceptual model of customer switching behavior that has been empirically tested. After careful review of the past studies in service switching, it is found that this study may be the first empirical study in service switching that aims at modeling service switching behavior from the customer's perspective. In other words, the customer's beliefs about various aspects of services, attitude toward the current service provider and attitude toward switching, and intention to switch are explicitly included in the model and the causal relations among these constructs were empirically tested. As a result, this service switching model would help both managers and researchers understand what goes on in the customer's mind when he or she switch. Although there are other empirical studies in this area, none of them explicitly included intention to switch or switching behavior into the model. For example, customer switching has been (implicitly) related to perceptions of quality in the banking industry (Rust and Zahorik 1993), overall dissatisfaction in the insurance company (Crosby and Stephens 1987), and service encounter failure in retail stores (Kelly, Hoffman, and Davis 1993).

Although it may be contended that Keaveney's (1995) study is the first empirical study in service switching that explicitly identifying the causes of switching behavior, it can be argued that the objective of her empirical study was just to identify and classify the possible causes of switching behavior. No causal relations between the causes and switching behavior were tested at all. Specifically, Keaveney (1995) reported the empirical results of a critical incident study conducted

among more than 500 service customers. The research identified more than 800 critical behavior of service firms that caused customers to switch service. Then these reasons were classified into eight general categories of causes for customer switching. As such, the causal relations proposed in Keaveney's (1995) switching model are still needed to be tested.

As mentioned earlier in Chapter II, there are four main limitations of past studies in the area of customer service switching. First, most of the past studies were industry-specific. This industry-specific nature of these studies limits the generalizability of the findings and also lead us to adopt the broader, cross-industry perspective endorsed by many service researchers (Berry and Parasuraman 1993; Lovelock 1993; Zeithaml, Berry, and Parasuraman 1993) in this study.

This study tries to overcome the first limitation, the industry-specific nature of past studies, by incorporating three service industries (fastfood restaurants, hair salons, and banks) representing three categories (search, experience, and credence services) into the study. Although the data were collected from university students, the findings of this study should be, more or less, generalizable to the student market segment across different categories of services.

Second, variables and relationships specified in the past service switching studies tend to be asymmetrical in terms of positive and negative factors included in the model. Most of the past studies either emphasize only intentions to engage in behaviors beneficial to an organization (i.e., intentions to repatronize) or intentions to engage in behaviors harmful to an organization (i.e., intentions to switch). As such, the variables and relationships that predict positive outcomes are

asymmetrical with those that predict negative outcomes, and vice versa.

This study tries to overcome the second limitation, the asymmetrical of positive and negative factors in the model, by including two opposing attitudes, attitude toward switching (+) and attitude toward the current service provider (-), in the conceptual model of service switching. These two attitudes and their determinants help create symmetrical balance in terms of positive and negative factors in the conceptual model as suggested by LaBarbera and Mazursky (1983).

Third, SERVQUAL and SERVPERF measure only the process quality attribute of service quality. This may be due to the fact that service industries that were included in the scale-development studies (Cronin and Taylor 1994; Parasuraman, Berry, and Zeithaml 1988) are mainly experience and credence services. From review of other service quality studies, however, it is found that customers used both outcome and process quality attributes in determining overall service quality. As such, both of these service quality measurement scales may only partially explain the variation in constructs such as overall service quality and attitude toward the current service provider.

This study tries to overcome the third limitation, the lack of outcome quality attribute in SERVQUAL and SERVPERF, by adding service outcome quality construct as a hypothesized determinant of attitude toward the current service provider in the conceptual model. Findings show that service outcome quality play an important role as a determinant of the attitude in every model tested in this study. As such, there is evidence to support the contention that service outcome quality may play an important role in the customer's service switching behavior.

Finally, although a few past studies investigated the role of customers' psychographics and demographics in service switching, none of them investigated the role of customers' personal characteristics especially personality traits in service switching. Personality traits, such as innovativeness, opinion leadership, and dogmatism, have been found to play an important role in new product acceptance and product switching behavior. It is possible that these personality traits may play an important role in service switching.

This study tries to overcome the fourth limitation, the lack of personal characteristics such as personality traits in the service switching model, by including innovativeness and opinion leadership as the hypothesized determinants of attitude toward switching in the conceptual model. Findings show that innovativeness is a significant determinant of attitude toward switching in both full and modified general model (i.e., three services combined). In the industry-specific models, however, it is found that innovativeness is the significant determinant of the attitude for banks, but not for fastfood restaurants and hair salons. As such, there is some evidence to support the contention that personal characteristics such as personality traits may play an important role in the customer's service switching behavior.

5.2.2 Managerial Implications

Implication for All Types of Services. The purpose of this study is to propose a general model of customer service switching and empirically test several hypotheses derived from the model. This study also demonstrate the method and technique that managers could use to understand their

customers' psychological process in service switching. The results suggest that both attitude toward the current service provider and attitude toward switching are significant determinants of intention to switch in all models tested. Attitude toward the current service provider has negative impact on intention to switch while attitude toward switching has a positive impact on the intention. The results also show that attitude toward the current service provider has a negative impact on attitude toward switching. As such, service managers should put efforts to maintain and/or improve their customers' positive attitude toward their services while try to minimize their customers' favorable attitude toward switching in order to minimize their customers' intention to switch from their services to other service providers.

Attitude toward the current service provider is, in turn, significantly and positively affected by service outcome quality and responsiveness in all models tested. In other words, the higher the perceived quality of outcome and the more responsive the service provider/employee, the more positive is the attitude toward the current provider. As such, service managers should put efforts improve their current customers' attitude toward themselves who are the service providers by improving both service outcome quality and process quality component especially responsiveness. They should put their efforts to understand what constitutes the outcome quality that satisfied customers in their service industry and then improve their service offers to create such desirable outcome quality. For example, exploratory research such as focus group interviews can be conducted to understand customers' expectation and desires from using the service. Customer complaint hotline may be established to understand what has gone wrong with the outcome of using the service as well as other process quality components.

Service managers should also put their efforts to improve their employees' responsiveness to customers' requests. This is especially important for credence services since the customers have to depend more on process quality components to judge the service quality. For example, training programs can be conducted to increase the service staff to improve the quality of their service encounter with customers especially in terms of responsiveness. Prompt services and the staff's willingness to help are very desirable characteristics of services for customers.

Implications for Search and Experience Services. Attitude toward service switching, on the other hand, is significantly and positively affected by alternative attractiveness and innovativeness, and significantly and negatively by attitude toward the current service provider in the model for all three services combined and the model for credence services (i.e., banks). In the model for search services (i.e., fastfood restaurants) and that for experience services (i.e., hair salons), however, only alternative attractiveness and attitude toward the current service provider are the significant determinants of the attitude.

As such, service managers of search (e.g., fastfood restaurants) and experience services (e.g., hair salons) should put their efforts to maintain and/or increase the attractiveness of their services to keep their current customers and to attract customers from their competitors. Since the outcome of using search services can be accurately and efficiently evaluated by customers, both informative and/or fact-oriented and persuasive advertisements can be used to communicate with current customers and to attract customers from competitors. Sales promotion such as free service trials and demonstration can also be used to attract new customers and competitors' customers.

Since results show that attitude toward the current service provider tends to reduce the customer's favorable attitude toward switching. Service managers should put efforts to improve the customer's attitude toward their services by improving service outcome quality and responsiveness as discussed earlier.

Implications for Credence Services. In the model for credence services, attitude toward switching are affected by alternative attractiveness, innovativeness, and attitude toward the current service provider. The implications for alternative attractiveness and attitude toward the current service provider are similar to those in search and experience services. As such, only implications for innovativeness is discussed here.

Service managers of search and experience services should also put their efforts to identify customers in their service industry who are innovators because this personality trait has a positive impact on attitude toward switching. In other words, innovators of a specific domain are quite venturesome and are eager to try new ideas in their domain of interest. These characteristics lead them to have more favorable attitude toward switching than other types of customers. As such, innovators who currently are the customers of competitors should be identified and approached to try our services. Informative or fact-oriented communication about our services should also be directed at both our innovative customers and our competitors' innovative customers.

Implication for Research for Managerial Decision Making. This study also demonstrates the approach that may be useful to service managers in their attempt to understand their customers'

psychological process in service switching. To the extent that the service manager finds this type of models diagnostically useful, four recommendations for business research are proposed here:

First, the model approach can be used for *industry-specific analysis*. Service managers should know what category or type of service industry they are in because attitudes and intention to switch in different service industries and categories may be affected by different determinants. For example, innovativeness is a major determinant of attitude toward service switching for banks but not for fastfood restaurants and hair salons. Besides, responsiveness has more impact on attitude toward the current service provider than service outcome quality for banks while it has less impact on the attitude than service outcome quality for fastfood restaurants and hair salons.

By understanding what factors are the significant determinants of attitudes and intention toward switching their service industries, the service managers can formulate appropriate marketing strategies and tactics to maintain and/or increase loyalty and prevent customers from switching to competitive services. For example, if service outcome quality and responsiveness are important determinants of attitude toward the current service provider in fastfood restaurants, the manager should put efforts in improving the outcome quality of eating at the restaurant (e.g., better taste, more nutritional value, better value for money, etc) and in providing prompt services to customers' orders and requests.

Since the results of this study are exploratory in nature, service managers should use these results with great care. The results from each individual service industry tested in this study should not be

generalized to services in other service categories or even to other services within the same category. However, the methodology shown above can be easily applied to other services in the same or different categories. The service managers are advised to utilize the approach used in this study to create a model specific to their industry to gain a thorough understanding of the importance of each of the factors included in the model.

Second, the model approach can be used for *segment-level analysis*. The approach used in this study can also be used to estimate the model for each of the market segments. For example, for each service category tested in this study, the analysis of the model was, in fact, at the segment level because only university students, which is an important market segment for each of the services included in this study, were used as subjects in this study. Segment-level analysis will allow marketing managers to investigate the differential effects of the various hypothesized factors across market segments of the industry. As such, the service manager will have a better understanding of what factors are most important to each segment. This information would be very useful when the managers formulate their plans for different segments of the market.

Third, the approach can be used for *competitive analysis*. The approach used in this study can also be used to assess customers' perceptions, attitudes, and intention to switch toward competitors' services. Analyses of competitors allow marketing managers to understand the relative importance of each hypothesized factors in customers' switching. This information would be very useful when the managers plan competitive actions against their competitors.

Finally, the approach can be used for *temporal analysis*. The approach can also be used to re-estimate the model periodically to track change in factors affecting service switching. The relative importance of the factors may change over time as a result of internal changes in the customer, the competitive environment, the economy, etc. This information would be very useful when marketing managers want to adjust their marketing plans and programs to meet the changes.

5.3 Limitations

There are several limitations due to the research methodology and research process used in this study. Each of them is discussed below.

5.3.1 Research Design

Since the objective of this study was to propose and empirically test a "general" service switching model (or a service switching model that is applicable to various service industries), both precision of measurement and generalizability of the results were the desirable aspects of the research design. Precision of measurement was important in this study because of the need to test the hypothesized causal relationships specified in the conceptual model. Generalizability was important because of the need for generalization of the results to various service industries.

As a result, a survey using university students (which can be considered as a relatively homogeneous

sample in terms of demographic and psychographic background) as sample and three services (which represented three major categories of services) as stimuli was chosen as the research design of this study. This design would optimize both precision of measurement and generalizability across different service industries. The major limitation of this design, however, is the fact that the design would have serious problems in existential realism and generalizability of results across different segments of the market.

5.3.2 Sample and sampling procedure

University students were used as subjects in this study. Generally, the use of students subjects has been criticized for two reasons. Firstly, students may be an inappropriate demographic group in terms of their experience with, or knowledge of the product/service class being investigated. Secondly, the student sample is not randomly selected but is, in fact, a convenience sample. As such, there is no statistical grounds for generalizing the findings.

In response to the first criticism, it can be argued that university students are not an inappropriate demographic group for services (fastfood restaurants, hair salons, banks) included in this study. In fact, they are a major target segment for all these three service industries. Because of time limitation, many university students eat frequently at fastfood restaurants. They also spend considerable amount of income on hair care at hair salons. Finally, almost all university students here in Hong Kong have saving and/or checking accounts at banks.

In response to the second criticism, Calder, Phillips, and Tybout (1981, 1982, 1983) argue that, if the purpose of the research is theory testing as opposed to generalization, it is acceptable to use student subjects. It is a rigorous test of the theory if proper methodological procedures are followed.

In terms of sampling procedure, the sampling procedure used in this study is convenient sampling resulting in inability to calculate the sampling error. A nonprobability sampling technique such as convenient sampling was chosen in this study because of the problem of practicality. In other words, a probability sampling procedure such as simple random sampling could not be performed in this study because of the lack of the list of students to be used as the sampling frame. Without the sampling frame, it is not possible for us to perform probability sampling. As a result, it may not be appropriate to apply the results of this study even to the student segment because we don't know whether or not the subjects are representative sample of the student population.

5.3.3 Data collection procedure

Data used in the analyses in this study were obtained from three different versions of self-administered questionnaires that were randomly given to the subjects. According to Kinnear and Taylor (1996), the data collection method used in this study is the communication method of data collection. Although the communication method is more appropriate than observation in eliciting subjects' perceptions, attitudes, intention, and past behavior, it has two main limitations. The first relates to the subject's inability to provide the desired data resulting in nonresponse error. The second relates to the lack of existential realism due to interaction between the interviewers and the

subjects resulting in several types of response error.

5.3.4 Measurement

Another limitation of this study stems from the low reliability of the two constructs, responsiveness (α=0.5042) alternative attractiveness (α=0.6426) although both of them are unidimensional. These two variables were kept in the models for substantive reasons. As such, the results of the models tested especially when both of these constructs are significant may not be very reliable and should be interpreted with great care.

5.4 Future Research Direction

5.4.1 The Use of More Comprehensive Model as the Conceptual Framework

A possible future research concerns with the extension of the conceptual model of consumer service switching. The conceptual model used in this study hypothesizes that the customer's intention to switch, which is viewed as the immediate antecedent of the switching behavior, is determined by the customer's own attitudes and corresponding cognitive beliefs. It is clear that the current conceptual model ignores the influence groups in the formation of intention to switch. Adding the social component such as subjective norm and normative beliefs would provide more explanatory and predictive power to the consumer service switching model. Theory of reasoned action (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975) would be appropriate to be used as a framework for this

study. If the control component such as perceived behavioral control and control beliefs is also included, theory of planned behavior (Ajzen 1985; 1991) would be appropriate to be used as a framework for the study.

Another possible extension of the conceptual model is to incorporate actual behavior into the model. In this case, a longitudinal study would be needed to test the relationship between intention to switch and actual switching behavior.

5.4.2 Testing the Effect of Situational Factors on Service Switching

The effect of firm-specific factors and situational factors on customer switching behavior has been ignored in this study. It is generally believed that firm-specific factors such as size, number of employees, location, management orientation, and strategy may have significant impacts on the firm's performance, which in turn, affects the customer's switching behavior. These firm-specific factors should be tested to see whether or not they have significant impacts on the customer's switching behavior.

It is also generally believed that situational factors affecting the firms such as social, political, economic, technological, and competitive forces may have significant impacts on the firm's performance, which in turn, affects the customer's service switching behavior. As such, these situational factors should be tested to see whether or not they have impact on the customer's service switching behavior.

5.4.3 Testing the Effect of the Customer's Personal Characteristics

Only two personality traits, innovativeness and opinion leadership, were included in the conceptual model in this study. It is possible that other personal characteristics such as demographics (e.g., sex, age, income, education), psychographics (e.g., lifestyle, values), and other personality traits (e.g., dogmatism, aggressiveness, susceptibility to reference group influence) may have significant impact on the customer's service switching. As such, these personal characteristics should be tested to see whether or not they have impact on the customer's service switching behavior.

5.4.4 Using Different Service Classification Schemes to Choose Representative Service Industries to Be Tested in the Conceptual Model

In this study, Powpaka's (1996) service classification scheme was used to select representative services to be included in the study. Future studies can and should utilize other classification schemes such as those of Kotler (1980) and Lovelock (1983) in selecting the service industries to be included in the study.

5.5 Summary

This chapter presents the summary of this study. Four topics were discussed in this chapter: (1) summary of the research, (2) contribution of the research, (3) limitations, and (4) future research direction. Specifically, research objective, conceptual model and hypotheses, design, sample and

sampling procedure, data collection, data analysis, and research results were discussed in the first section. This was followed by discussion of theoretical contribution and managerial implication in the second section. In the third section, limitations due to the research process used in this study were discussed. Finally, recommendations for future research were discussed in the fourth section.

FIGURE 1
The Conceptual Model of Customer Service Switching

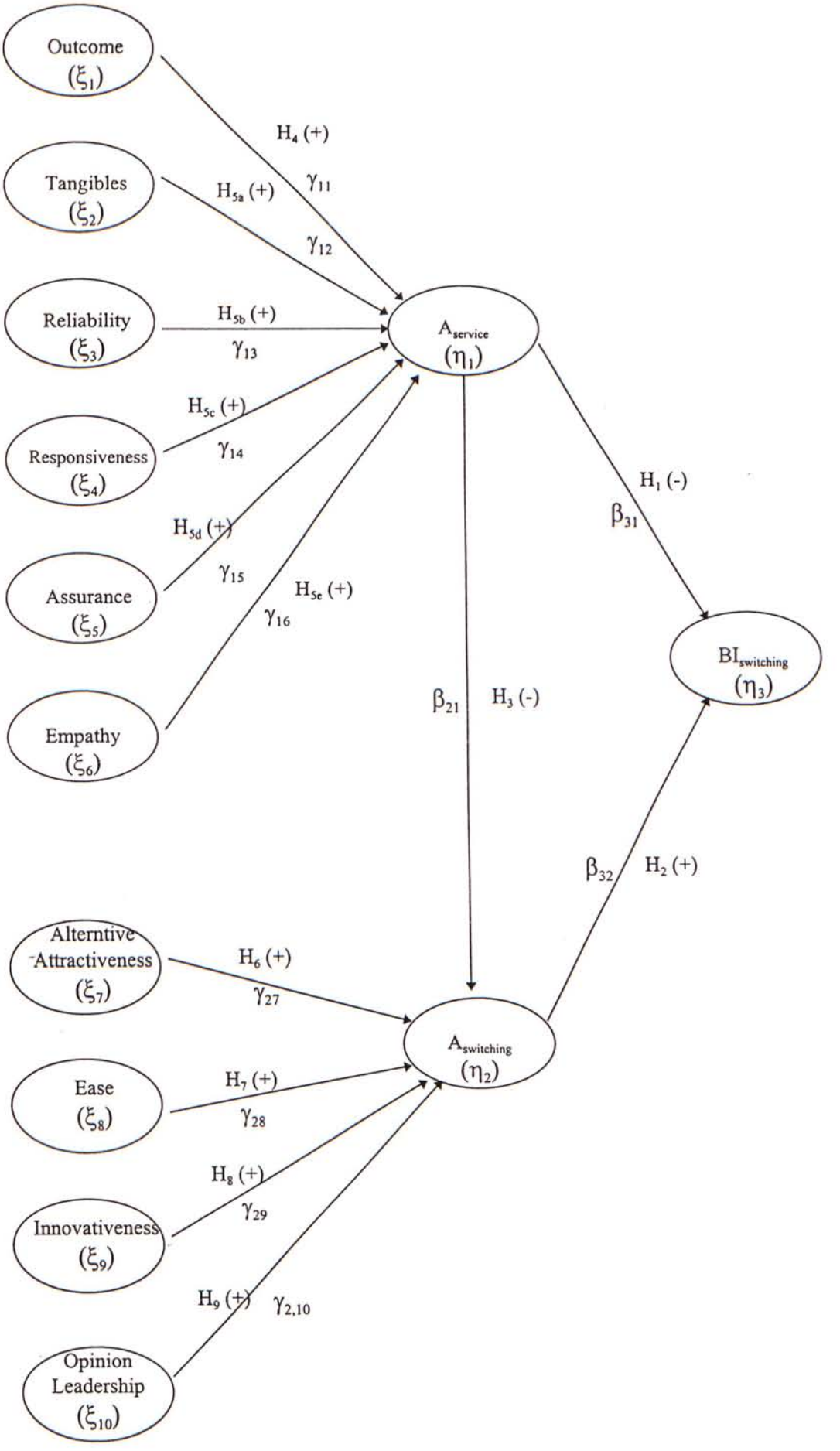

FIGURE 2
The Modified (Reduced) Model of Customer Service Switching

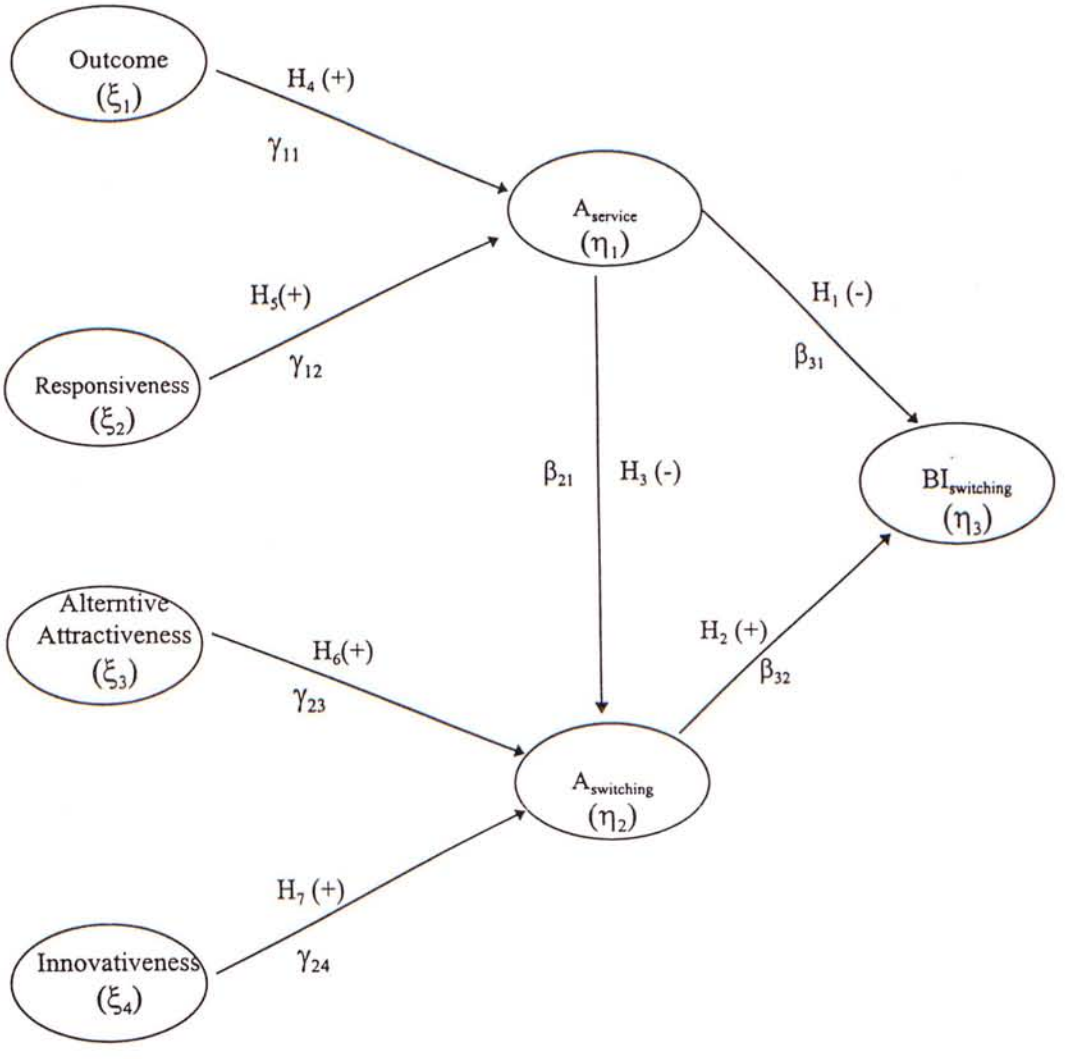

TABLE 1
Results of Pretest 1

Industry	Number (%) of respondents			χ^2 value	p value
	Search	Experience	Credence		
Banks	15 (20.83%)	28 (38.89%)	29 (40.28%)	5.0833	0.0787
Concerts	21 (29.17%)	44 (61.11%)	6 (8.33%)	30.9577	0.0000
Credit cards	21 (29.17%)	36 (50.00%)	14 (19.44%)	10.6761	0.0048
Fastfoods	40 (55.56%)	31 (43.06%)	1 (1.39%)	34.7500	0.0000
Hair salons	3 (4.17%)	55 (76.39%)	14 (19.44%)	62.5833	0.0000
Hotels	17 (23.61%)	51 (76.39%)	4 (5.56%)	49.0833	0.0000
Life insurance	11 (15.28%)	20 (27.78%)	40 (55.56%)	18.6197	0.0001
Paging services	14 (19.44%)	46 (63.89%)	12 (16.67%)	30.3333	0.0000
Theaters	24 (33.33%)	48 (66.67%)	0 (0.00%)	48.000	0.0000
Package Tours	2 (2.78%)	57 (79.17%)	12 (16.67%)	72.5352	0.0000

TABLE 2
Rotated Factor Pattern for Exogenous Constructs

Rotation Method: Varimax

Rotated Factor Pattern

	FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5
X1	0.33212	0.23918	0.07092	-0.11521	0.18799
X2	0.10375	0.03569	-0.06495	-0.09849	0.18293
X3	0.17659	0.14085	0.00458	-0.05521	0.19483
X4	**0.79041**	0.08603	0.08893	-0.08152	0.04960
X5	**0.77980**	0.11439	0.02141	-0.01710	0.07846
X6	**0.71211**	0.12483	-0.00871	0.01187	0.30517
X7	**0.79130**	0.03506	-0.02525	0.01870	0.23875
X8	0.30934	0.01854	-0.01334	0.07666	0.14810
X9	0.29037	0.28382	-0.00855	-0.06157	0.49315
X10	0.25389	0.01719	0.00188	0.06470	0.26614
X11	0.02578	0.27986	0.04595	-0.02068	-0.01609
X12	0.19728	0.15909	-0.04085	-0.06201	0.50589
X13	0.13377	0.21418	0.09296	-0.10037	**0.69952**
X14	0.17498	0.02274	-0.10829	-0.05977	**0.72180**
X15	0.32079	0.25785	0.01701	-0.12265	**0.64108**
X16	0.06145	**0.85092**	0.02411	-0.14238	0.06527
X17	0.06303	**0.85777**	0.00683	-0.09510	0.14860
X18	0.16190	**0.67871**	-0.05380	-0.00252	0.16566
X19	0.14254	**0.65393**	-0.07452	0.14575	0.15771
X20	0.09948	-0.01918	0.01461	0.05976	0.10064
X21	0.04595	-0.11413	-0.03999	0.08613	-0.02266
X22	-0.01141	0.05297	0.13024	0.04471	-0.02282
X23	0.00033	0.05081	-0.02059	0.02724	0.09894
X24	0.01263	0.02944	0.09012	-0.04565	0.02273
X25	-0.00634	0.06892	0.19429	**0.74993**	0.04549
X26	-0.05050	-0.11941	0.08196	**0.80494**	-0.08777
X27	0.00301	0.00373	0.27034	**0.78398**	-0.06827
X28	-0.02830	-0.11922	0.27335	**0.63667**	-0.16084
X29	-0.02689	0.07256	**0.80975**	0.13736	-0.01566
X30	0.04822	-0.10385	**0.74523**	0.16388	-0.03387
X31	-0.02850	0.01490	**0.75267**	0.21386	0.07591
X32	0.09464	-0.04074	**0.72879**	0.20424	-0.04742

TABLE 2
Rotated Factor Pattern for Exogenous Constructs (Continued)

Rotation Method: Varimax

Rotated Factor Pattern

	FACTOR6	FACTOR7	FACTOR8	FACTOR9	FACTOR10
X1	**0.68789**	0.00515	0.09090	-0.06093	-0.07178
X2	**0.81180**	0.11641	0.14709	0.02539	0.08249
X3	**0.83356**	0.00364	0.15119	-0.00075	0.09150
X4	0.13659	0.03155	0.12782	0.08389	0.09700
X5	0.13989	-0.03595	0.08004	0.03796	-0.01596
X6	0.07725	-0.02158	0.17606	0.07243	0.03182
X7	0.12277	0.02105	0.12506	-0.00219	0.04978
X8	0.22872	0.09605	**0.67254**	-0.01436	0.08976
X9	0.12258	0.00473	**0.41228**	-0.00226	0.00399
X10	0.16790	0.05579	**0.74831**	0.08742	0.14728
X11	0.08369	0.08898	0.27801	0.03343	**0.75983**
X12	0.04426	0.09360	-0.04450	-0.07505	**0.59967**
X13	0.22281	-0.05607	0.11295	0.06113	0.02037
X14	0.15857	0.07626	0.18753	0.01195	0.09438
X15	0.20084	0.09651	0.06609	0.07834	-0.00732
X16	-0.01157	0.03145	0.08997	-0.02113	-0.01463
X17	0.02863	0.04434	0.07481	-0.05861	0.01843
X18	0.21925	0.04173	-0.09482	-0.05676	0.26193
X19	0.24559	0.05472	-0.02324	-0.05267	0.24338
X20	0.05428	0.02783	-0.04134	**0.84504**	0.03974
X21	-0.07027	-0.05880	0.09381	**0.83980**	-0.05141
X22	-0.00233	**0.82788**	0.06653	-0.01182	0.07226
X23	0.07624	**0.82804**	-0.05408	-0.09204	0.15874
X24	0.03798	**0.82095**	0.09742	0.06763	-0.10084
X25	-0.10504	-0.02812	0.01314	0.00050	-0.11729
X26	-0.09139	0.02702	0.00122	0.07801	0.03944
X27	-0.03846	0.03797	0.12852	0.10121	-0.04663
X28	0.02079	-0.00644	-0.04083	-0.00205	0.08945
X29	0.02007	0.00127	0.09885	-0.06857	-0.01622
X30	0.04568	0.17657	0.02161	0.00226	0.14364
X31	-0.03168	0.04716	-0.01042	0.01424	-0.10838
X32	-0.04231	0.01631	-0.12078	0.02829	0.00247

TABLE 3
Rotated Factor Pattern for Endogenous Constructs

Rotation Method: Varimax

Rotated Factor Pattern

	FACTOR1	FACTOR2	FACTOR3
Y1	**0.89106**	-0.16355	-0.12714
Y2	**0.88380**	-0.23147	-0.06355
Y3	**0.87546**	-0.13730	-0.20844
Y4	-0.14454	0.22335	**0.83372**
Y5	-0.12451	0.24038	**0.85979**
Y6	-0.13295	0.37081	**0.70939**
Y7	-0.15515	**0.83247**	0.36208
Y8	-0.27622	**0.82438**	0.29625
Y9	-0.18642	**0.86973**	0.23591

TABLE 4
Confirmatory Factor Analysis: Exogenous Constructs

Constructs and indicators	Standardized factor loadings	Reliability
Outcome quality		0.8287
X1 ("excellent")	1.00[a]	
X2 ("acceptable")	1.01[b]	
X3 ("satisfied")	1.17[b]	
Tangibles		0.8351
X4 ("having up-to-date equipment")	1.00[a]	
X5 ("appealing physical facilities")	0.96[b]	
X6 ("well dressed employees")	1.05[b]	
X7 ("appearance of physical facilities")	1.11[b]	
Reliability		0.7152
X8 ("keeping promise")	1.00[a]	
X9 ("sympathetic and reassuring")	1.04[b]	
X10 ("dependable")	1.10[b]	
Responsiveness		0.5042
X11* ("not receiving prompt services")	1.00[a]	
X12* ("not willing to help")	1.40[b]	
Assurance		0.7481
X13 ("trust")	1.00[a]	
X14 ("feeling safe")	0.98[b]	
X15 ("polite")	1.11[b]	
Empathy		0.8289
X16* ("not giving individual attention")	1.00[a]	
X17* ("not giving personal attention")	1.15[b]	
X18* ("not knowing needs")	1.41[b]	
X19* ("not having best interest at heart")	1.37[b]	
Alternative attractiveness		0.6426
X20 ("easy to replace")	1.00[a]	
X21 ("attractive alternatives")	1.89[b]	
Ease of identifying outcome quality		0.7831
X22* ("difficult to evaluate")	1.00[a]	
X23* ("putting a lot of effort")	0.99[b]	
X24 ("easy to find out")	0.90[b]	
Innovativeness		0.7949
X25 ("among the first")	1.00[a]	
X26 ("interested enough to try")	1.08[b]	
X27 ("trying a lot when first appeared")	1.27[b]	
X28 ("trying before other people"	0.92[b]	

TABLE 4
Confirmatory Factor Analysis: Exogenous Constructs (Continued)

Constructs and indicators	Standardized factor loadings	Reliability
Opinion leadership		0.7964
X29 ("asking my advice")	1.00[a]	
X30 ("influencing choice")	0.94[b]	
X31 ("coming for information")	0.96[b]	
X32 ("regarded as good source of advice")	0.91[b]	
Fit statistics:		
χ^2_{418}	1,081.01 (p=0.0)	
GFI[c]	0.89	
AGFI[d]	0.86	
NFI[e]	0.87	
CFI[f]	0.92	
IFI[g]	0.92	

*denotes items that require reverse coding
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 5
Confirmatory Factor Analysis: Endogenous Constructs

Constructs and indicators	Standardized factor loadings	Reliability
Attitude toward the current service provider		0.8974
Y1 ("positive/negative")	1.00[a]	
Y2 ("favorable/unfavorable")	1.12[b]	
Y3 ("like/dislike")	0.96[b]	
Attitude toward switching		0.8243
Y4 ("positive/negative")	1.00[a]	
Y5 ("favorable/unfavorable")	1.08[b]	
Y6 ("like/dislike")	1.03[b]	
Intention to switch		0.9069
Y7 ("considering switching")	1.00[a]	
Y8 ("likely to switch")	1.01[b]	
Y9 ("planning to switch")	0.88[b]	

Fit statistics:

χ^2_{24}	102.30 (p=0.0)
GFI[c]	0.96
AGFI[d]	0.93
NFI[e]	0.97
CFI[f]	0.98
IFI[g]	0.98

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]$p<0.01$, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 6
Measurement Model and Structural Model Results of the Full Model: All Services Combined

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Outcome quality		0.8287	0.6733
X1 ("excellent")	1.00[a]	0.65	
X2 ("acceptable")	0.96[b]	0.60	
X3 ("satisfied")	1.09[b]	0.77	
Tangibles		0.8351	0.6000
X4 ("having up-to-date equipment")	1.00[a]	0.56	
X5 ("appealing physical facilities")	0.96[b]	0.51	
X6 ("well dressed employees")	1.06[b]	0.63	
X7 ("appearance of physical facilities")	1.11[b]	0.70	
Reliability		0.7152	0.5033
X8 ("keeping promise")	1.00[a]	0.46	
X9 ("sympathetic and reassuring")	1.02[b]	0.49	
X10 ("dependable")	1.10[b]	0.56	
Responsiveness		0.5042	0.3950
X11* ("not receiving prompt services")	1.00[a]	0.26	
X12* ("not willing to help")	1.44[b]	0.53	
Assurance		0.7481	0.5400
X13 ("trust")	1.00[a]	0.51	
X14 ("feeling safe")	0.98[b]	0.49	
X15 ("polite")	1.10[b]	0.62	
Empathy		0.8289	0.5375
X16* ("not giving individual attention")	1.00[a]	0.34	
X17* ("not giving personal attention")	1.16[b]	0.46	
X18* ("not knowing needs")	1.41[b]	0.68	
X19* ("not having best interest at heart")	1.40[b]	0.67	
Alternative attractiveness		0.6426	0.6000
X20 ("easy to replace")	1.00[a]	0.26	
X21 ("attractive alternatives")	1.89[b]	0.94	
Ease of identifying outcome quality		0.7831	0.5867
X22* ("difficult to evaluate")	1.00[a]	0.63	
X23* ("putting a lot of effort")	0.99[b]	0.62	
X24 ("easy to find out")	0.90[b]	0.51	
Innovativeness		0.7949	0.5375
X25 ("among the first")	1.00[a]	0.47	
X26 ("interested enough to try")	1.08[b]	0.54	
X27 ("trying a lot when first appeared")	1.26[b]	0.74	
X28 ("trying before other people"	0.92[b]	0.40	
Opinion leadership		0.7964	0.5225
X29 ("asking my advice")	1.00[a]	0.57	
X30 ("influencing choice")	0.94[b]	0.51	
X31 ("coming for information")	0.96[b]	0.53	
X32 ("regarded as good source of advice")	0.92[b]	0.48	

TABLE 6
Measurement Model and Structural Model Results of the Full Model: All Services Combined (Continued)

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Attitude toward current service provider		0.8974	0.7900
Y1 ("positive/negative")	1.00[a]	0.78	
Y2 ("favorable/unfavorable")	1.06[b]	0.87	
Y3 ("like/dislike")	0.97[b]	0.72	
Attitude toward switching		0.8243	0.6267
Y4 ("positive/negative")	1.00[a]	0.59	
Y5 ("favorable/unfavorable")	1.07[b]	0.67	
Y6 ("like/dislike")	1.03[b]	0.62	
Intention to switch		0.9069	0.7533
Y7 ("considering switching")	1.00[a]	0.81	
Y8 ("likely to switch")	1.00[b]	0.82	
Y9 ("planning to switch")	0.88[b]	0.63	

B. Structual model results	Dependent Constructs		
Independent Constructs	$A_{service}$	$A_{switching}$	BI
Outcome quality	0.72[b]		
Tangibles	0.074		
Reliability	-0.0025		
Responsiveness	0.38[b]		
Assurance	0.075		
Empathy	0.046		
Alternative attractiveness		0.51[b]	
Ease of identifying outcome quality		0.0063	
Innovativeness		0.14[c]	
Opinion leadership		0.086	
$A_{service}$		-0.33[b]	-0.25[b]
$A_{switching}$			0.79[b]
Proportion of variance explained (R^2)	0.79	0.35	0.65

Fit statistics:

χ^2_{418}	1,845.13 (p=0.0)
GFI[d]	0.86
AGFI[e]	0.83
NFI[f]	0.86
CFI[g]	0.91
IFI[h]	0.91

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]p<0.05, 1-tailed
[d]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[e]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[f]Bentler and Bonnett's (1980) "normed fit index"
[g]Bentler's (1990) "comparative fit index"
[h]Bollen's (1989) "incremental fit index"

TABLE 7
Measurement Model and Structural Model Results of the Reduced Model: All Services Combined

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Outcome quality		0.8287	0.6267
X1 ("excellent")	1.00[a]	0.70	
X2 ("acceptable")	0.96[b]	0.49	
X3 ("satisfied")	1.09[b]	0.69	
Responsiveness		0.5042	0.4400
X11* ("not receiving prompt services")	1.00[a]	0.22	
X12* ("not willing to help")	1.74[b]	0.66	
Alternative attractiveness		0.6426	0.5700
X20 ("easy to replace")	1.00[a]	0.29	
X21 ("attractive alternatives")	1.89[b]	0.85	
Innovativeness		0.7949	0.5375
X25 ("among the first")	1.00[a]	0.47	
X26 ("interested enough to try")	1.12[b]	0.58	
X27 ("trying a lot when first appeared")	1.23[b]	0.71	
X28 ("trying before other people" advice")	0.91[b]	0.39	
Attitude toward current service provider		0.8974	0.7900
Y1 ("positive/negative")	1.00[a]	0.78	
Y2 ("favorable/unfavorable")	1.06[b]	0.87	
Y3 ("like/dislike")	0.96[b]	0.72	
Attitude toward switching		0.8243	0.6267
Y4 ("positive/negative")	1.00[a]	0.59	
Y5 ("favorable/unfavorable")	1.06[b]	0.67	
Y6 ("like/dislike")	1.03[b]	0.62	
Intention to switch		0.9069	0.7533
Y7 ("considering switching")	1.00[a]	0.81	
Y8 ("likely to switch")	1.00[b]	0.82	
Y9 ("planning to switch")	0.88[b]	0.53	

TABLE 7
Measurement Model and Structural Model Results of the Reduced Model: All Services Combined (Continued)

B. Structual model results	Dependent Constructs		
Independent Constructs	$A_{service}$	$A_{switching}$	BI
Outcome quality	0.82[b]		
Responsiveness	044[b]		
Alternative attractiveness		0.49[b]	
Innovativeness		0.20[b]	
$A_{service}$		-0.31[b]	-0.25[b]
$A_{switching}$			0.79[b]
Proportion of variance explained (R^2)	0.82	0.35	0.65

Fit statistics:

χ^2_{157}	414.20 (p=0.0)
GFI[c]	0.93
AGFI[d]	0.91
NFI[e]	0.93
CFI[f]	0.96
IFI[g]	0.96

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 8
Measurement Model and Structural Model Results of the Reduced Model: Fastfood Restaurants

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Outcome quality		0.8408	0.6467
X1 ("excellent")	1.00[a]	0.70	
X2 ("acceptable")	0.86[b]	0.52	
X3 ("satisfied")	1.01[b]	0.72	
Responsiveness		0.5682	0.5350
X11* ("not receiving prompt services")	1.00[a]	0.22	
X12* ("not willing to help")	1.98[b]	0.85	
Alternative attractiveness		0.6569	0.5700
X20 ("easy to replace")	1.00[a]	0.29	
X21 ("attractive alternatives")	1.72[b]	0.85	
Innovativeness		0.7528	0.4775
X25 ("among the first")	1.00[a]	0.45	
X26 ("interested enough to try")	0.75[b]	0.25	
X27 ("trying a lot when first appeared")	1.35[b]	0.82	
X28 ("trying before other people" advice")	0.94[b]	0.39	
Attitude toward current service provider		0.9042	0.8000
Y1 ("positive/negative")	1.00[a]	0.80	
Y2 ("favorable/unfavorable")	1.05[b]	0.90	
Y3 ("like/dislike")	0.93[b]	0.70	
Attitude toward switching		0.8559	0.7167
Y4 ("positive/negative")	1.00[a]	0.74	
Y5 ("favorable/unfavorable")	1.05[b]	0.82	
Y6 ("like/dislike")	0.89[b]	0.59	
Intention to switch		0.8961	0.7767
Y7 ("considering switching")	1.00[a]	0.86	
Y8 ("likely to switch")	0.93[b]	0.75	
Y9 ("planning to switch")	0.92[b]	0.72	

TABLE 8
Measurement Model and Structural Model Results of the Reduced Model: Fastfood Restaurants (Continued)

B. Structual model results	Dependent Constructs		
Independent Constructs	$A_{service}$	$A_{switching}$	BI
Outcome quality	0.90[b]		
Responsiveness	0.44[b]		
Alternative attractiveness		0.58[b]	
Innovativeness		-0.032	
$A_{service}$		-0.25[b]	-0.17[b]
$A_{switching}$			0.63[b]
Proportion of variance explained (R^2)	0.83	0.22	0.42

Fit statistics:

χ^2_{158}	349.34 (p=0.0)
GFI[c]	0.85
AGFI[d]	0.80
NFI[e]	0.85
CFI[f]	0.91
IFI[g]	0.91

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 9
Measurement Model and Structural Model Results of the Reduced Model: Hair Salons

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Outcome quality		0.8404	0.6400
X1 ("excellent")	1.00[a]	0.76	
X2 ("acceptable")	0.79[b]	0.48	
X3 ("satisfied")	0.95[b]	0.68	
Responsiveness		0.4119	0.4800
X11* ("not receiving prompt services")	1.00[a]	0.11	
X12* ("not willing to help")	2.76[b]	0.85	
Alternative attractiveness		0.6533	0.5900
X20 ("easy to replace")	1.00[a]	0.28	
X21 ("attractive alternatives")	1.79[b]	0.90	
Innovativeness		0.7857	0.5450
X25 ("among the first")	1.00[a]	0.60	
X26 ("interested enough to try")	1.04[b]	0.64	
X27 ("trying a lot when first appeared")	1.02[b]	0.62	
X28 ("trying before other people" advice")	0.74[b]	0.32	
Attitude toward current service provider		0.8864	0.7833
Y1 ("positive/negative")	1.00[a]	0.86	
Y2 ("favorable/unfavorable")	0.93[b]	0.74	
Y3 ("like/dislike")	0.93[b]	0.75	
Attitude toward switching		0.8035	0.5967
Y4 ("positive/negative")	1.00[a]	0.59	
Y5 ("favorable/unfavorable")	1.08[b]	0.69	
Y6 ("like/dislike")	0.92[b]	0.51	
Intention to switch		0.8970	0.7600
Y7 ("considering switching")	1.00[a]	0.83	
Y8 ("likely to switch")	0.98[b]	0.80	
Y9 ("planning to switch")	0.89[b]	0.65	

TABLE 9
Measurement Model and Structural Model Results of the Reduced Model: Hair Salons (Continued)

B. Structual model results	Dependent Constructs		
Independent Constructs	$A_{service}$	$A_{switching}$	BI
Outcome quality	0.90[b]		
Responsiveness	0.51[b]		
Alternative attractiveness		0.65[b]	
Innovativeness		-0.0096	
$A_{service}$		-0.27[b]	-0.25[b]
$A_{switching}$			0.82[b]
Proportion of variance explained (R^2)	0.83	0.38	0.70

Fit statistics:

χ^2_{157}	330.95 (p=0.0)
GFI[c]	0.85
AGFI[d]	0.80
NFI[e]	0.85
CFI[f]	0.91
IFI[g]	0.92

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 10
Measurement Model and Structural Model Results of the Reduced Model: Banks

A. Measurement model results Constructs and indicators	Standardized factor loadings	Reliability	Proportion of variance extracted
Outcome quality		0.8066	0.6100
X1 ("excellent")	1.00[a]	0.66	
X2 ("acceptable")	0.84[b]	0.47	
X3 ("satisfied")	1.03[b]	0.70	
Responsiveness		0.5221	0.4150
X11* ("not receiving prompt services")	1.00[a]	0.32	
X12* ("not willing to help")	1.27[b]	0.51	
Alternative attractiveness		0.5859	0.4650
X20 ("easy to replace")	1.00[a]	0.40	
X21 ("attractive alternatives")	1.15[b]	0.53	
Innovativeness		0.7549	0.5000
X25 ("among the first")	1.00[a]	0.34	
X26 ("interested enough to try")	1.42[b]	0.70	
X27 ("trying a lot when first appeared")	1.40[b]	0.67	
X28 ("trying before other people" advice")	0.90[b]	0.28	
Attitude toward current service provider		0.8970	0.8667
Y1 ("positive/negative")	1.00[a]	0.83	
Y2 ("favorable/unfavorable")	1.01[b]	0.85	
Y3 ("like/dislike")	1.05[b]	0.92	
Attitude toward switching		0.7940	0.5900
Y4 ("positive/negative")	1.00[a]	0.54	
Y5 ("favorable/unfavorable")	1.04[b]	0.58	
Y6 ("like/dislike")	1.10[b]	0.65	
Intention to switch		0.9167	0.8333
Y7 ("considering switching")	1.00[a]	0.81	
Y8 ("likely to switch")	1.02[b]	0.85	
Y9 ("planning to switch")	1.02[b]	0.84	

TABLE 10
Measurement Model and Structural Model Results of the Reduced Model: Banks (Continued)

B. Structual model results	Dependent Constructs		
Independent Constructs	$A_{service}$	$A_{switching}$	BI
Outcome quality	0.52[b]		
Responsiveness	0.76[b]		
Alternative attractiveness		0.41[b]	
Innovativeness		0.51[b]	
$A_{service}$		-0.27[b]	-0.27[b]
$A_{switching}$			0.82[b]
Proportion of variance explained (R^2)	0.78	0.52	0.70

Fit statistics:

χ^2_{156}	345.11 (p=0.0)
GFI[c]	0.85
AGFI[d]	0.80
NFI[e]	0.87
CFI[f]	0.92
IFI[g]	0.93

*denotes items that require reverse coding.
[a]Fixed at 1.00
[b]p<0.01, 1-tailed
[c]Jöreskog and Sörbom's (1989) "goodness-of-fit index"
[d]Jöreskog and Sörbom's (1989) "adjusted goodness-of-fit index"
[e]Bentler and Bonnett's (1980) "normed fit index"
[f]Bentler's (1990) "comparative fit index"
[g]Bollen's (1989) "incremental fit index"

TABLE 11
Comparison of Structural Model Results of the Overall Model and Individual Models

Relations	All services combined	Fastfood restaurants	Hair salons	Banks
$A_{service}$				
outcome quality	0.82[a]	0.90[a]	0.90[a]	0.52[a]
responsiveness	0.44[a]	0.44[a]	0.51[a]	0.76[a]
R^2	0.82	83	83	78
$A_{switching}$				
alternative attractiveness	0.49[a]	0.58[a]	0.65[a]	0.41[a]
innovativeness	0.20[a]	-0.032	-0.0096	0.51[a]
$A_{service}$	-0.31[a]	-0.25[a]	-0.27[a]	-0.27[a]
R^2	0.35	0.22	0.38	0.52
Intention				
$A_{service}$	-0.25[a]	-0.17[a]	-0.25[a]	-0.27[a]
$A_{switching}$	0.79[a]	0.63[a]	0.82[a]	0.82[a]
R_2	0.65	0.42	0.70	0.70

[a]$p<0.01$, 1-tailed

TABLE 12
Summary of Research Results

Hypotheses	All Services Combined	Fastfood Restaurants	Hair Salons	Banks
H_1: $A_{service} \rightarrow BI_{switching}$ (-)	supported	supported	supported	supported
H_2: $A_{switching} \rightarrow BI_{switching}$ (+)	supported	supported	supported	supported
H_3: $A_{service} \rightarrow A_{switching}$ (-)	supported	supported	supported	supported
H_4: outcome quality$\rightarrow A_{service}$ (+)	supported	not supported	not supported	supported
H_5: responsiveness$\rightarrow A_{service}$ (+)	supported	supported	supported	supported
H_6: alt.attractiveness$\rightarrow A_{switching}$ (+)	supported	supported	supported	supported
H_7: innovativeness$\rightarrow A_{switching}$ (+)	supported	supported	supported	supported

Note that these seven hypotheses are those hypotheses that are supported in the original (full) model.

APPENDIX

Sample Questionnaire: Fastfood Restaurants

Instruction: The purpose of this study is to measure your feelings and opinions about the service of the fastfood restaurant you currently use. Please follow the instructions below and then respond to a series of questions/scales in the questionnaire according to HOW you actually feel and what you really think. Keep in mind that there is no right or wrong answer. What I am interested in is your true feeling about the service.

If you feel that your answer is *very closely related* to one end of the scale, you should place your check mark as follows:

very negative 1 2 3 4 5 6 7 very positive

or

very negative 1 2 3 4 5 6 7 very positive

If you feel that your response is *quite closely related* to one end or the other of the scale (but not extremely), you should place your check mark as follows:

strongly disagree 1 2 3 4 5 6 7 strongly agree

or

strongly disagree 1 2 3 4 5 6 7 strongly agree

If you feel that you response seems *only slightly related* to one end or the other of the scale (but not really neutral), you should place your check mark as follows:

dislike very much 1 2 3 4 5 6 7 like very much

or

dislike very much 1 2 3 4 5 6 7 like very much

IMPORTANT: Make each question/scale a separate and independent judgement. Work at fairly high speed through this questionnaire. Do not worry or puzzle over individual questions/scales. It is your first impression, the immediate feelings about the question/scale that I want. On the other hand, please do not be careless, because I want your true impression.

Please name the fastfood restaurant have you visited most frequently during the past three months? _____ (Note: Henceforth, the restaurant you have just named will be called "the fastfood restaurant".)

The first set of questions deals with your *perceptions* and *feelings* about various aspects of the service of the fastfood restaurant you frequently use. Please indicate your degree of agreement/disagreement with the following statements about the fastfood restaurant.

1. The quality of eating at the fastfood restaurant I regularly visit is excellent.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

2. The quality of eating at the fastfood restaurant I regularly visit is acceptable.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

3. I am satisfied with the quality of eating at the fastfood restaurant I regularly visit.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

4 . The fastfood restaurant I regularly visit has up-to-date equipment.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

5. The physical facilities of the fastfood restaurant I regularly visit are visually appealing.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

6. The employees of the fastfood restaurant I regularly visit are well dressed and appear neat.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

7. The appearance of physical facilities of the fastfood restaurant I regularly visit is like what a good fastfood restaurant should be.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

8. When the fastfood restaurant I regularly visit promises to do something by a certain time, it does so.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

9. When you have problems, the employee at the fastfood restaurant I regularly visit is sympathetic and reassuring.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

10. The fastfood restaurant I regularly visit is dependable.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

11. I do not receive prompt service from the employee of the fastfood restaurant I regularly visit.
   strongly disagree 1 2 3 4 5 6 7 strongly agree

12. Employees of the fastfood restaurant I regularly visit are not always willing to help customers.
strongly disagree 1 2 3 4 5 6 7 strongly agree

13. I can trust the employee of the fastfood restaurant I regularly visit.
strongly disagree 1 2 3 4 5 6 7 strongly agree

14. I can feel safe in my transactions with the employee of the fastfood restaurant I regularly visit.
strongly disagree 1 2 3 4 5 6 7 strongly agree

15. Employees at the fastfood restaurant I regularly visit are polite.
strongly disagree 1 2 3 4 5 6 7 strongly agree

16. The fastfood restaurant I regularly visit does not give me individual attention.
strongly disagree 1 2 3 4 5 6 7 strongly agree

17. Employees of the fastfood restaurant I regularly visit do not give me personal attention.
strongly disagree 1 2 3 4 5 6 7 strongly agree

18. Employees of the fastfood restaurant I regularly visit do not know what my needs are.
strongly disagree 1 2 3 4 5 6 7 strongly agree

19. The fastfood restaurant I regularly visit does not have my best interests at heart.
strongly disagree 1 2 3 4 5 6 7 strongly agree

20. There are other fastfood restaurants that can easily replace the fastfood restaurant I regularly visit.
strongly disagree 1 2 3 4 5 6 7 strongly agree

21. I think fastfood restaurants other than the one I regularly visit are attractive alternatives.
strongly disagree 1 2 3 4 5 6 7 strongly agree

22. It is very difficult to evaluate the outcome quality of eating at a fastfood restaurant.
strongly disagree 1 2 3 4 5 6 7 strongly agree

23. I need to put a lot of effort in to evaluating the outcome of eating at a fastfood restaurant.
strongly disagree 1 2 3 4 5 6 7 strongly agree

24. It is very easy to find out about the outcome quality of the fastfood restaurant I regularly visit.
strongly disagree 1 2 3 4 5 6 7 strongly agree

25. My overall attitude toward the fastfood restaurant I regularly visit is
very negative 1 2 3 4 5 6 7 very positive

26. My overall feeling about the fastfood restaurant I regularly visit is
very unfavourable 1 2 3 4 5 6 7 very favourable

27. Overall, I _____ the fastfood restaurant I regularly visit.
dislike very much 1 2 3 4 5 6 7 like very much

28. My overall attitude toward switching from the fastfood restaurant I regularly visit to another fastfood restaurant is
very negative 1 2 3 4 5 6 7 very positive

29. My overall feeling toward switching from the fastfood restaurant I regularly visit to another fastfood restaurant is
very unfavourable 1 2 3 4 5 6 7 very favourable

30. Overall, I _____ the idea of switching from the fastfood restaurant I regularly visit to another fastfood restaurant.
dislike very much 1 2 3 4 5 6 7 like very much

31. I am considering switching from the fastfood restaurant I regularly visit to another fastfood restaurant.
strongly disagree 1 2 3 4 5 6 7 strongly agree

32. It is likely that I will switch from the fastfood restaurant I regularly visit to another fastfood restaurant.
strongly disagree 1 2 3 4 5 6 7 strongly agree

33. I plan to switch to eat at another fastfood restaurant.
strongly disagree 1 2 3 4 5 6 7 strongly agree

The second set of questions deals with your perceptions and feelings about yourself. Please state your degree of agreement/disagreement with the following statements about yourself.

1. In general, I am among the first in my circle of friends to try a new fastfood restaurant restaurant when it opens.
strongly disagree 1 2 3 4 5 6 7 strongly agree

2. If I heard that a new fastfood restaurant was available in the market, I would be interested enough to try it.
strongly disagree 1 2 3 4 5 6 7 strongly agree

3. Compared to my friends I have tried a lot of new fastfood restaurants when they first appeared in the market.
strongly disagree 1 2 3 4 5 6 7 strongly agree

4. I like to try a new fastfood restaurant before other people do.
strongly disagree 1 2 3 4 5 6 7 strongly agree

5. My friends often ask my advice about fastfood restaurants.
strongly disagree 1 2 3 4 5 6 7 strongly agree

6. I sometimes influence the choice of fastfood restaurants my friends visit.
strongly disagree 1 2 3 4 5 6 7 strongly agree

8. My friends come to me more often than I go to them for information about fastfood restaurants.
strongly disagree 1 2 3 4 5 6 7 strongly agree

9. I feel that I am generally regarded by my friends as a good source of advice about fastfood restaurants.
strongly disagree 1 2 3 4 5 6 7 strongly agree

The last set of questions deals with your personal information.

Sex: _____Male _____Female

Age: _____

Average monthly expenses: _____$1,000 or less
_____$1,001 - $3,000
_____$3,001 - $5,000
_____$5,001 - $7,000
_____$7,001 - $10,000
_____over $10,000

Number of family members living together:_____

Thank you very much for your kind cooperation.

REFERENCES

Ajzen, I. (1991), "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes*, Vol. 50 (2), p. 179-211.

_____ and M. Fishbein (1980), *Understanding Attitudes and Predicting Social Change*, Englewood Cliffs, NJ: Prentice Hall, 1980.

Anderson, J.C. (1987), "An Approach for Confirmatory Measurement and Structural Equation Modeling of Organizational Properties," *Management Science*, Vol. 33 (Apr), p. 525-541.

Babakus, E. and G.W. Boller (1992), "An Empirical Assessment of the SERVQUAL Scale," *Journal of Business Research*, Vol. 24 (3), p. 253-268.

Bagozzi, R.P. (1981), "Attitudes, Intentions, and Behavior: a Test of Some Key Hypotheses," *Journal of Personality and Social Psychology*, Vol. 41, p. 607-627.

_____ (1982), "A Field Investigation of Causal Relations Among Cognitions, Affect, Intentions, and Behavior," *Journal of Marketing Research, Vol.* 1982, p. 562-584.

Baker, J. and C.W. Jr. Lamb (1993), "Measuring Architectural Design Service Quality," *Journal of Professional Service Marketing*, Vol. 10(1), p. 89-106.

Batra, R. and O.T. Ahtola (1990), "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes," *Marketing Letters,* 2, p. 159-170.

Bearden, W.O., S. Sharma, and J. E. Teel, (1982), "Sample Size Effects Upon Chi-Square and Other Statistics Used in Evaluating Causal Models," *Journal of Marketing Research*, Vol. 19 (November), p. 425-30.

Bell, M.L. (1981), "Tactical Service Marketing and the Process of Remixing," *Marketing of Services*, J.H. Donnelly and W.R. George, eds., Chicago: American Marketing Association, p. 163-167.

Bentler, P. M. (1990) "Comparative Fit Indexes in Structural Models," *Psychological Bulletin*, Vol. 107 (2), p. 238-46.

_____ and D. G. Bonett (1980), "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures," *Psychological Bulletin*, Vol. 88 (3), p. 588-606.

Berry, L.L. (1983), "Relationship Marketing," in *Emerging Perspectives on Services Marketing*, L.L. Berry, G.L. Shostack and G.D. Upah, eds., Chicago: American Marketing Association, p. 25-28.

_____ (1980), "Services Marketing is Different," *Business*, Vol 30 (3), p. 24-29.

_____ and A. Parasuraman (1993), "Building a New Academic Field - The Case of Services Marketing," *Journal of Retailing*, Vol. 69 (Spring), p. 13-60.

Bitner, M.J. (1990), "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses," *Journal of Marketing*, Vol. 54 (2), p. 69-82.

Bollen, K. A. (1989), "A New Incremental Fit Index for General Structural Equation Models," *Sociological Methods and Research*, Vol. 17, p. 303-316.

Bolton, R.N. and J.H. Drew (1991), "A Multistage Model of Customers' Assessments of Service Quality and Value," *Journal of Consumer Research*, Vol. 17 (March), p. 375-384.

Booms, B.H. and M.J. Bitner (1981), "Marketing Strategies and Organization Structures for Services Firms," *Marketing of Services*, J.H. Donnelly and W.R. George, eds., Chicago: American Marketing, p. 47-51.

Boulding, W., A. Kalra, R. Staelin, and V.A. Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, Vol. 30(1), p. 7-27.

Brierly, P.W. and N. Baterson (1977), "Ask a Silly Question," *Management Services in Government*, Vol. 32 (1), p. 14-25.

Brown, S.W. and T.A. Swartz (1989), "A Gap Analysis of Professional Service quality," *Journal of Marketing*, Vol. 53 (Apr), p. 92-98.

Calder, B.J., L.W. Philips, and A.M. Tybout (1983), "Beyond External Validity," *Journal of Consumer Research*, Vol. 10 (Jun), p. 112-114.

_____, _____, and _____ (1982), "The Concept of External Validity," *Journal of Consumer Research*, Vol. 9 (Dec), p. 240-244.

_____, _____, and _____ (1981), "Designing Research for Application," *Journal of Consumer Research*, Vol. 8 (Sep), p. 197-207.

Carmen, J.M. (1990), "Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions," *Journal of Retailing*, Vol. 66 (Spring), p. 33-55.

_____ and E. Langeard (1980), "Growth Strategies of Service Firms," *Strategic Management Journal*, Vol. 1 (Jan-Mar), p. 7-22.

Chase, R.B. (1978), "Where Does the Consumer Fit in a Service Operation?" *Harvard Business Review*, Vol. 56 (Nov-Dec), p. 137-142.

Churchill, G.A. Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, Vol. 16 (Feb), p. 64-73.

Cronbach, L.J. (1951), "Coefficient Alpha and the Internal Structure of Tests," *Psychometrika*, Vol. 16 (Sep), p. 297-334.

_____ and P.E. Meehl (1955), "Construct Validity in Psychological Tests," *Psychological Bulletin*, Vol. 52 (Jul), p. 281-302.

Cronin, J.J. Jr. and S.A. Taylor (1994), "SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality," *Journal of Marketing*, Vol. 58 (Jan), p. 125-131.

_____ and _____ (1992), "Measuring Service Quality: Reexamination and Extension," *Journal of Marketing*, Vol. 56 (Jul), p. 55-68.

Crosby, L.A. and S. Stephens (1987), "Effects of Relationship Marketing on Satisfaction, Retention, and Prices in the Life Insurance Industry," *Journal of Marketing Research*, Vol. 24 (Nov), p. 404-411.

Darby, M.R. and E. Karni (1973), "Free Competition and the Optimal Amount of Fraud," *Journal of Law and Economics*, Vol. 16, p. 67-86.

Fishbein, M. and I. Ajzen (1975), *Beliefs, Attitude, Intention, and Behavior*, Reading, MA: Addison-Wesley.

Fornell, C. and D. F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research,* Vol. 18 (Feb), p. 39-80.

Garvin, D. (1988), *Managing Quality*, New York: The Free Press.

Gerbing, D.W. and J. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," *Journal of Marketing Research*, Vol. 25 (May), p. 186-192.

Goldsmith, R.E. and C. Hofacker (1991), "Measuring Consumer Innovativeness," *Journal of the Academy of Marketing Science,* Vol. 19 (Summer), p. 209-221.

Grönroos, C. (1991), "The Nature of Services and Service Quality," *Service Management and Marketing*, Lexington Books: D.C. Heath and Co./Lexington, Massachusetts/Toronto, Chapter 2.

_____ (1990), "Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behavior Interface," *Journal of Business Research*, Vol. 20 (1), p. 3-11.

_____ (1983), *Innovative Organizational Structures for Service Firms*, L.L. Berry, G.L. Stostack and G.Upah, eds., Chicago: American Marketing Association.

_____ (1982), *Strategic Management and Marketing in the Service Sector*, Swedish School of Economics and Business Administration, Helsingfors, Sweden.

Hattie, J. (1985), "Methodology Review: Assessing Unidimensionality of Tests and Items," *Applied Psychological Measurement*, Vol. 9 (Jun), p. 139-164.

Haywook-Farmer, J. (1988), "A Conceptual Model of Service Quality," *International Journal of Operations and Production Management*, Vol. 8 (6), p. 19-29.

Hill, T.P. (1977), "On Goods and Services," *Review of Income and Wealth*, Vol. 23 (Dec), p. 315-338.

Iacobucci, E. (1992), "An Empirical Examination of Some Basic Tenets in Services: Goods-Services Continua," *Advances in Services Marketing and Management*, JAI Press Inc., Vol. 1, p. 23-52.

Jöreskog, K. G. and D. Sörbom (1993), *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language,* IN: Scientific Software, Inc.

_____ and D. Sörbom (1989), *LISREL 7: A Guide to the Program and Application*, 2nd ed., Chicago: SPSS Publications.

_____ and D. Sörbom (1988), *PRELIS: A Program for Multivariate Data Screening and Data Summarization*, 2nd ed. IN: Scientific Software, Inc.

Judd, R.C. (1964), "The Case for Redefining Services," *Journal of Marketing*, Vol. 28 (Jan), p. 59.

Keaveney, S.M. (1995), "Consumer Switching Behavior in Service Industries: An Exploratory Study," *Journal of Marketing*, Vol. 59 (Apr), p. 71-82.

Kelley, S.W., K.D. Hoffman, and M.A. Davis (1993), "A Typology of Retail Failures and Recoveries," *Journal of Retailing*, Vol. 69 (Winter), p. 429-452.

King, C.W. and J.O. Summers (1970), "Overlap of Opinion Leadership Across Product Categories," *Journal of Marketing Research*, Vol. 7 (August), p. 43-50.

Kotler, P. (1980), *Principle of Marketing*, Englewood Cliffs, NJ: Prentice-Hall Inc.

LaBarbera, P.A. and D. Mazursky (1983), "A Longitudinal Assessment of Consumer Satisfaction/Dissatisfaction: The Dynamic Aspect of the cognitive Process," *Journal of Marketing Research*, Vol. 20 (Nov), p. 393-404.

Lamb, C.W. Jr, J.F. Jr Hair, and C. McDaniel (1996), *Marketing*, 3rd Ed., South-Western College Publishing.

Lovelock, C.H. (1983), "Classifying Services to Gain Strategic Marketing Insights," *Journal of Marketing*, Vol. 47 (Summer), p. 9-20.

_____ (1981), "Why Marketing Management Needs to Be Different for Services," *Marketing of Services*, J.H. Donnelly and W.R. George, eds., Chicago: American Marketing Association, p. 5-9.

_____ (1980), "Towards a Classification of Services," *Theoretical Developments in Marketing*, C.W. Lamb and P.M. Dune, eds., Chicago: American Marketing Association, p. 72-76.

Maiti, S.S. and B.N. Mukherjee (1990), "A Note on Distributional Properties of theJöreskog and Sörbom Fit Indices," *Psychometrika*, Vol. 55 p. 721-726.

Mangold, W.G. and E. Babakus (1991), "Service Quality: The Front-Stage vs. The Back-Stage Perspective," *Journal of Services Marketing*, Vol. 5 (Fall), p. 59-70.

McDonald, R.P. (1981), "The Dimensionality of Tests and Items," *British Journal of Mathematical and Statistical Psychology*, Vol. 34 (May), p. 100-117.

McGrath, J.E. (1982), "Dilemmatics: The Study of Research Choices and Dilemmas" in *Judgement Calls in Research*, J.E. McGrath, J. Martin, and R.A. Kulka, eds., Beverly Hills, CA: SAGE Publications, Inc.

Midley, D. F. and G.R. Dowling (1978), "Innovativeness: The Concept and Its Measurement," *Journal of Consumer Research*, Vol. 20 (February), p. 229-47.

Morgan, M.S. and C.S. Dev (1994), "An Empirical Study of Brand Switching for a Retail Service," *Journal of Retailing*, Vol. 70 (3), p. 267-282.

Murray, K.B. and J.L. Schlacter (1990), "The Impact of Services Versus Goods on Consumers' Assessment of Perceived Risk and Variability," *Journal of the Academy of Marketing Science*, Vol. 18, p. 51-65.

Myers, J.H. and T.S. Robertson (1972), "Dimensions of Opinion Leadership," *Journal of Marketing Research*, Vol. 9 (Feb), p. 41-46.

Nelson, P. (1974), "Advertising as Information" *Journal of Political Economy*, Vol. 81, p. 729-754.

_____ (1970), "Information and Consume Behavior," *Journal of Political Economy*, Vol. 78, p. 311-329.

Nunnally, J.C. (1978), *Psychometric Theory*, 2nd ed. NY: McGraw-Hill.

Parasuraman, A., V.A. Zeithaml, and L.L. Berry (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Future Research," *Journal of Marketing*, Vol. 58 (Jan), p. 111-124.

_____, _____, and _____ (1991), "Refinement and Reassessment of the SERVQUAL Scale," *Journal of Retailing*, Vol. 67 (Winter), p. 420-450.

_____, _____, and _____ (1988), "SERVQUAL: A Multi-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, Vol. 64 (Spring), p. 2-40.

_____, _____, and _____ (1985), "A Conceptual Model of Service Quality and Its Implications for Future Research," *Journal of Marketing*, Vol. 49 (Fall), p. 41-50.

Peter, P.J. and J.C. Olson (1994), *Understanding Consumer Behavior*, Irwin, p. 87.

Peter, J.P., G.A. Churchill and T. Brown (1992), "Caution in the Use of Difference Scores as Measures of Marketing Constructs," *A.C. Nielsen Working Paper*, Number 91-92, University of Wisconsin-Madison, Madison, WI.

Peters, T. (1988), *Thriving on Chaos*, New York: Alfred A. Knopf.

Ping, R. (1993), "The Effects of Satisfaction and Structural Constraints on Retailer Exiting, Voice, Loyalty, Opportunism and Neglect," *Journal of Retailing*, Vol. 69 (3), p. 320-352.

_____ (1990), "Channel Relationship Termination: A Review and an Experiment," *1990 Winter Educator's Conference Proceedings*, R. Spekman et al., eds., Chicago: American Marketing Association.

_____ and F.R. Dwyer (1988), "Relationship Termination in Marketing Channels," *1988 Summer Educator's Conference Proceedings*, G. Frazier et al. eds., Chicago: American Marketing Association.

Powpaka, S. (1996), "The Role of Outcome Quality as a Determinant of Overall Service Quality in Different Categories of Services Industries: an Empirical Investigation," *Journal of Services Marketing*, Vol. 10 (2), p. 5-25.

Rathmell, J.M. (1974), *Marketing in the Service Sector*, Cambridge, MA: Winthrop.

Reichheld, F.F. and W.R. Jr. Sasser (1990), "Zero Defections: Quality Comes to Services," *Harvard Business Review*, Vol. 68 (Sep/Oct), p. 105-111.

Reynolds, F.D. and W.R. Darden (1971), "Mutually Adaptive Effects of Interpersonal Communication," *Journal of Marketing Research*, Vol. 8 (Nov), p. 449-454.

Richard, M.D. and A.W. Allaway (1993), "Service Quality Attributes and Choice Behavior," *Journal of Service Marketing*, Vol. 7 (1), p. 59-68.

Rogers, E.M.(1983), *Diffusion of Innovations*, 3rd ed., NY: Free Press.

Rusbult, C.E., D. Farrell, G. Rogers, and A.G. Mainous (1988), "Impact of Exchange Variables on Exit, Voice, Loyalty, and Neglect: An Integrative Model of Responses to Declining Job Satisfaction," *Academy of Management Journal*, Vol. 31 (3), p. 599-627.

_____, D.J. Johnson, and G.D. Morrow (1986), "Determinants and Consequences of Exit, Voice, Loyalty, and Neglect: Responses to Dissatisfaction in Adult Romantic Involvements," *Human Relations*, Vol. 39 (1), p. 45-63.

_____ and I.M. Zembrodt (1983), "Responses to Dissatisfaction in Romantic Involvements: A Multidimensional Scaling Analysis," *Journal of Experimental Social Psychology*, Vol. 19 (3), p. 274-293.

_____, _____, and L.K. Gunn (1982), "Exit, Voice, Loylty, and Neglect: Responses to Dissatisfaction in Romantic Involvement," *Journal of Personal and Social Psychology*, Vol. 43, p. 1230-1242.

Rushton A.M. and D.J. Carson (1989), "The Marketing of Services: Managing the Intangibles," *European Journal of Marketing,* Vol. 23 (8), p. 23-44.

Rust, R.T. and A.J. Zahorik (1993), "Customer Satisfaction, Customer Retention, and Market Share," *Journal of Retailing*, Vol. 69 (Summer), p. 193-215.

Sasser, W.E. Jr., R.P. Olsen, and D.D. Wyckoff (1978), *Management of Service Operations: Text and Cases*, Boston: Allyn and Bacon.

Schmenner, R.W. (1986), "How Can Service Business Survive and Prosper?" *Sloan Management Review*, Spring, p. 21-32.

Shimp, T.A. and A. Kavas (1984), "The Theory of Reasoned Action Applied to Coupon Usage," *Journal of Consumer Research*, Vol. 11 (Dec), p. 795-809.

Shostack, G.L. (1977), "Breaking Free From Product Marketing," *Journal of Marketing*, Vol. 41 (Apr), p. 73-80.

Singh, J. (1990), "Voice, Exit, and Negative Word-of-Month Behaviors: An Investigation Across Three Service Categories," *Journal of the Academy of Marketing Science*, Vol. 18 (1), p. 1-15.

Teas, R.K. (1994), "Expectations as a Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment," *Journal of Marketing*, Vol. 58 (Jan), p. 132-139.

_____ (1993), "Expectations, Performance Evaluation, and Consumers' Perceptions of Quality," *Journal of Marketing*, Vol. 57 (Oct), p. 18-34.

Thomas, D.R.E. (1978), "Strategy is Different in Service Business," *Harvard Business Review*, Vol. 56 (Jul-Aug), p. 158-165.

Upah, G.D. (1980), "Mass Marketing in Services Retailing: A Review and Synthesis of Major Methods," *Journal of Retailing*, Vol. 56 (Fall), p. 59-76.

_____ and E.B. Uhr (1981), "Advertising by Public Accountants: A Review and Evaluation of Copy Strategy," *Marketing of Services* J.H. Donnelly and W.R. George, eds., Chicago: American Marketing Association, p. 95-99.

Vandermerwe, S. and M. Chadwick (1989), "The Internationalization of Services," *The Servuce Industries Journal*, Vol. 9 (1), p. 79-93.

Zanna, Mark P., and John K. Rempel (1988), "Attitudes: A New Look at an Old Concept," in *The Social Psychology of Knowledge*. Daniel Bar-Tal and Arie Kruglanski, eds. New York: Cambridge University Press, p. 315-334.

Zeithaml, V. (1981), "How Consumer Evaluation Processes Differ Between Goods and Services," *Marketing of Services*, J.H. Donnelly and W.R. George, eds, Chicago: American Marketing Association.

_____, L.L. Berry and A. Parasuraman (1993), "The Nature and Determinants of Customer Expectations of Service," *Journal of the Academy of Marketing Science*, Vol. 21 (Winter), p. 1-12.

_____, _____, and _____ (1988), "Communication and Control Process in the Delivery of Service Quality," *Journal of Marketing*, Vol. 52 (Apr), p. 35-48.